



INSTITUTE FOR DEFENSE ANALYSES

Managing Within Constraints: Balancing U.S. Army Forces to Address a Full Spectrum of Possible Operational Needs

David R. Graham, Project Leader
Robert B. Magruder, Project Leader
John R. Brinkerhoff
James L. Adams
Richard P. Diehl
Colin M. Doyle
Anthony C. Hermes

September 2010

Approved for public release;
distribution is unlimited.

IDA Paper P-4579

Log: H 10-001000



The Institute for Defense Analyses is a non-profit corporation that operates three federally funded research and development centers to provide objective analyses of national security issues, particularly those requiring scientific and technical expertise, and conduct related research on other national challenges.

About This Publication

This work was conducted by the Institute for Defense Analyses (IDA) under contract DASW01-04-C-0003, Task BE-6-2844, "Relieving Stress on the Force," for the Under Secretary of Defense (Personnel & Readiness). The views, opinions, and findings should not be construed as representing the official position of either the Department of Defense or the sponsoring organization.

Acknowledgments

The IDA Study Team benefitted substantially from the support and assistance received from many individuals for the conduct of our analyses of the U.S. Army during 2009.

Our Sponsor, Mr. Joseph Angello, Director of Readiness Programs, Office of the Deputy Under Secretary of Defense for Readiness and Training, was always ready to listen and provide useful guidance during the study. Colonel Joseph F. Adams, U.S. Army, helped us obtain data, find contacts, and organize meetings where we could learn and/or present our products.

Army officials were very helpful. Colonel Myles Miyamasu, U.S. Army, was our point of contact on the Army Staff and handled that position in an exemplary manner. Our thanks go also to Colonel Robin Meador, Chief, FMF Division, Force Management Directorate, G-3, Army Staff; Mr. Tim Muchmore, Army QDR Office; Mr. Rickey Smith, Director of ACIC Forward, Training and Doctrine Command (TRADOC); Mr. John Twohig, Force Design Directorate, TRADOC, Fort Leavenworth, Kansas; and Dr. John Bonin, U.S. Army War College. These individuals critiqued our papers and provided information on the Army.

Several IDA colleagues assisted with this study. Major General (Retired) Waldo Freeman reviewed this paper and made several suggestions that improved the quality. Dr. John Shea and Dr. William Hurley helped guide us through the maze of Irregular Warfare. Mr. Michael Leonard, our Division Director, kept us on course with many beneficial comments. The authors would like to thank our editor, Ms. Betsy MacCarthy, and Ms. Markel Miller and Ms. Barbara Varvaglione, who did an excellent job preparing the paper for production.

Copyright Notice

© 2010 Institute for Defense Analyses, 4850 Mark Center Drive, Alexandria, Virginia 22311-1882 • (703) 845-2000.

This material may be reproduced by or for the U.S. Government pursuant to the copyright license under the clause at DFARS 252.227-7013 (NOV 95).

INSTITUTE FOR DEFENSE ANALYSES

IDA Paper P-4579

**Managing Within Constraints: Balancing
U.S. Army Forces to Address a Full
Spectrum of Possible Operational Needs**

David R. Graham, Project Leader
Robert B. Magruder, Project Leader
John R. Brinkerhoff
James L. Adams
Richard P. Diehl
Colin M. Doyle
Anthony C. Hermes

Executive Summary

This report results from a line of inquiry commissioned by the Office of the Under Secretary of Defense for Personnel and Readiness, which tasked the Institute for Defense Analyses (IDA) to identify possible initiatives for increasing the versatility and adaptability of Army ground combat forces. This tasking reflects the recognition that future Combatant Commanders could face a spectrum of possible operational needs—ranging from major combat, to stability operations, to domestic response, to peacetime engagement—while resource limitations will cap military personnel strength. Land forces cannot effectively be optimized for any one category of operation without downplaying other operational needs; nor can the Army be made large enough to support dedicated forces for each of the specific kinds of operations.

Overview

Throughout 2008 and 2009, IDA focused on Army responsibilities and capabilities, sharing results on elements of the analysis with Army representatives and the OSD sponsor. This report is a synthesis of that work, published in order to provide a holistic view of the approach and findings, and to suggest some possible initiatives. The report summarizes three main lines of investigation:

Describing the Army today – Over most of the last decade, the Army has been converting from its traditional division-based task organization for conducting operations to the “Modular Force” and the Army Force Generation (ARFORGEN) expeditionary force management model, even as it has adjusted to the lessons learned from the ongoing operations in Iraq and Afghanistan. The chapters in this section assess this experience, highlighting the historical context, the lessons learned, and the Army’s issues and internal debates regarding doctrine and force structure.

Capabilities for stability operations – One of the major pending questions facing the Army is how to incorporate the doctrine, force structure, and institutions for performing stability operations without unduly eroding its capabilities for other mission areas. The chapters in Section II examine this question in some depth. We first sort through the inherited concepts and legacy organizations with responsibilities for capabilities supporting stability operations, and show how stability operations fit within a “comprehensive spectrum of operations,” providing a planning construct for defining versatile and adaptive forces. We then consider how the Army might create an institutional home for some capabilities—such as civil affairs, language fluency, and

cultural understanding—that are essential for stability operations, but do not fit well within existing Army institutions and cultures.

Balancing the allocation of Army personnel – Finally, debates on the future of the Army will hinge on the question of how (and whether) the Army can be made sufficiently versatile and adaptable to meet the needs across the Full Spectrum of Operations without adding personnel. The third section provides the personnel accounting framework necessary to inform these debates. To illustrate the framework’s application, we show how the Army employs its personnel, and then use it to explore some alternatives.

The overarching goal of this report is to assist in documenting the efforts that have been taken to reshape the Army over the last decade and to capture some of the more important lessons for the future. Contrary to the popular view, the U.S. Military Services often are their own best critics and strive continuously to improve the ways they are organized and operate. The Army has adapted to taxing demands and constraining laws and policies to find ways to support what now promises to be a successful operation in Iraq and a potentially successful operation in Afghanistan. Doing this has not been easy, and the Army’s institutions and Service members have been under substantial stress over most of the last decade, as the Army has met the demands of the ongoing Stability Operations in Operation Enduring Freedom and Operation Iraqi Freedom.

Pending Issues and Next Steps

The IDA analyses were intended to describe the ongoing evolution of the Army and identify unresolved issues to serve as an agenda for possible further investigation. We have characterized these as pending issues, indicating that we see merit in pursuing them, but our analyses, their development, and critical review are not sufficiently mature in all cases to warrant recommending their adoption. The major pending issues include the following:

- What institutions and resources are needed for developing, managing, and employing specialized capabilities for stability operations?
- Should the National Guard be directed to create a dedicated force for supporting civil authorities in response to catastrophic natural disasters or attacks?
- Should a strategic reserve force of heavy combat capability be established in the Army National Guard?
- Should a Reserve Component “operational reserve” be established, and what should the rotation cycle be?
- What modifications in Army doctrine and force structure should be incorporated based on lessons learned in Iraq and Afghanistan? For instance:
 - How can the Army utilize the Corps and Division Headquarters as a means to foster versatility and adaptability?

- Which Service should be assigned executive agency responsibility to plan for and resource a Theater Command structure for the conduct of stability operations?
- Should the Army move away from the organization of fixed Brigade Combat Teams (BCT), and plan and train for the attachment and detachment of maneuver battalions and their support elements within the BCT structure?
- Should the Army increase the maneuver capability of Infantry BCTs by adding to each a third infantry battalion?

Section Summaries

To serve as a more complete and in-depth summary of the material covered, and as a guide to the organization of this report, the following several pages provide synopses of each of the sections of chapters in the report.

Section I. The Army Today (Chapters 1 through 3)

In December 2003, General Peter Schoomaker, Chief of Staff of the United States Army, published a booklet called “The Way Ahead: Our Army at War, Relevant and Ready.” In that booklet, he presented 16 “Immediate Focus Areas.” Two of these focus areas were as follows:

- Modularity to “create modular capabilities-based unit designs”
- Force stabilization to “ensure unit stability and continuity and provide predictability to soldiers and their families”

Thus was born the Modular Force and the ARFORGEN cyclical readiness system. While both Modularity and cyclical rotation were envisioned within the Army long before, General Schoomaker took the culminating step that initiated the changes. These initiatives have had major effects on how the Army organizes its forces and prepares them to operate in the field. To appreciate the profound nature of these changes, the initial section of the report reviews some fundamentals of Army field operations, including the evolution of the division-based task organization for operations, and the story behind the introduction of the Modular Force and ARFORGEN.

Section II. Emerging Needs for Stability Operations (Chapters 4 through 7)

The logical starting point for assessing the balance of the Army and its path forward is to establish the range of tasks the nation might call on the Army to perform. In the Army’s most recent operations field manual (FM 3-0, Operations, February 2008), it defined the Army’s Spectrum of Operations to consist of Offense, Defense, Stability Operations, and Civil Support. IDA’s analysis used these categories as a starting point,

but sought to flesh out the lines of operation in a way that would be more descriptive and meaningful for force planning.

Section III. Balancing Requirements and Resources (Chapters 8 through 12)

The question motivating the third line of inquiry is how (and whether) the Army could be designed so as to be sufficiently versatile and adaptable that it would be able to meet the needs across the Full-Spectrum of Operations without adding more military personnel than are presently authorized. To meet the Army's responsibilities, it needs to strike an appropriate balance of capabilities in view of the wide range of possible operational demands discussed in the preceding section. Further, the Army needs to sustain a balance between combat units and support units, as well as an effective balance among the Active, National Guard, and Army Reserve components.

In order to study how to achieve a balance between capabilities needed and resources available, we first devised a framework to clarify how the Army employs its military personnel. We then illustrate the use of this framework to address questions regarding the balance of capabilities and to explore some alternative allocations of personnel. The chapters in this section describe our approach and these illustrative assessments.

The result of this effort by the IDA study team, performed over the past two years, is a set of observations that the Office of the Under Secretary of Defense for Personnel and Readiness and the Army leadership can consider for action, if they choose to do so. The results of our work suggest that it would be useful for the Army to continue to make appropriate changes in the Modular Force based on combat experience. They also suggest that it would be useful for the Army to reform the way it goes about providing Irregular Warfare capabilities and find a permanent management arrangement that will reduce the need to improvise to provide civil-military support for all operations. Finally, it would be useful for the Army to consider how it might design the Operating Force to be capable of Full-Spectrum Operations as described in this report.

Contents

Introduction.....	1
Section I: The Army Today	1
1. Introduction to the Modular Force	3
A. Introduction	3
1. Fundamentals of Army Field Operations	3
2. Task Organization	4
3. Echelons of the Army	4
4. The Military Decision-Making Process	6
5. Command Relationships.....	6
6. Pre-Modular Task Organization.....	8
B. Evolution of Army Divisions	9
1. The Reorganization Objective Army Division (ROAD) Division.....	10
2. The Army of Excellence (AoE) Division.....	11
3. Prelude to Modularity.....	14
C. Development of the Modular Force	15
D. Modular Brigade Combat Teams (BCTs)	23
1. Elements of the Modular BCTs.....	24
2. Brigade Special Troops Battalions	26
3. Brigade Support Battalions	27
4. The BCT as a Fixed Organization.....	28
E. Modular Support Brigades	30
1. Combat Aviation Brigades	30
2. Fires Brigades.....	30
3. Battlefield Surveillance Brigades	31
4. Maneuver Enhancement Brigades.....	31
5. Sustainment Brigades	32
F. Functional Support in the Modular Force	33
1. Tactical Command and Control	33
2. Sustainment Support.....	33
G. Observations	34
1. Effect of Fixed BCTs on Flexibility.....	34
2. Provision of Combat Support	35
3. Provision of Combat Service Support	36
4. The Future of the Modular Force	36
2. Modular Force Operations in OIF and OEF: 2006-2007	37
A. Introduction	37
B. BCT Operations: Field Commanders' Lessons Learned.....	37

1.	“Boots on the Ground”	38
2.	Number of Maneuver Battalions in the BCTs.....	39
3.	Nonstandard Mission Employment of BCT Units	40
4.	BCT Military Intelligence Capabilities	44
5.	Engineer Support in BCTs	45
6.	Sustainment Support in BCTs	46
7.	Irregular Warfare (IW) Enablers for BCTs	47
8.	Summary of Sources	48
C.	One-Day Snapshot of BCT Organization.....	49
1.	Task Organization of Maneuver Battalions in Iraq	49
2.	Task Organization of Reconnaissance, Surveillance, and Target Acquisition (RSTA) Battalions in Iraq	51
D.	Operations at Echelons above BCTs	52
1.	Aviation Support	52
2.	Battlefield Surveillance	52
3.	Sustainment Support.....	54
E.	Observations	55
1.	Task Organization of BCTs in the Theater	55
2.	Effect of Fixed BCTs on Flexibility	56
3.	Outlook for Modularity	56
3.	Deriving A BCT Force Equivalent.....	59
A.	Introduction	59
B.	The Division Force Equivalent.....	59
C.	BCT Force Equivalent.....	61
D.	Observations	63
	Section II: Emerging Needs for Stability Operations	65
4.	Defining the Spectrum of Operations.....	67
A.	Introduction	67
B.	The Initial Spectrum	67
1.	Peacetime Engagement Operations	68
2.	Limited Intervention Operations	69
3.	Peace Operations	70
4.	Irregular Warfare (IW) Operations.....	71
5.	Major Combat Operations	77
6.	Initial Spectrum of Operations	78
C.	A Modified Spectrum of Operations	79
1.	Establish Domestic Civil Support as a Major Operational Category	79
2.	Establish Homeland Defense as a Major Operational Category	81
3.	Move Counterdrug Activities to Domestic Civil Support Operations and Title It Domestic Counterdrug Operations.....	82
4.	Move Foreign Humanitarian Assistance to Peacetime Engagement Operations	82
5.	Move Consequence Management to Peacetime Engagement Operations and Title It Foreign Consequence Management Operations.....	82

6.	Move Peace Enforcement to Limited Intervention Operations	82
7.	Rename Irregular Warfare Operations as Stability Operations	82
8.	Change the Order of Presentation of the Major Operational Categories	83
D.	Observations	83
1.	The Degree of Combat	84
2.	The Spectrum and Methods.....	84
3.	Applications for the Modified Spectrum of Operations	85
5.	Understanding Irregular Warfare	87
A.	Introduction	87
B.	Comparing Irregular Warfare Capabilities	87
1.	Relationships among Kinds of Irregular Warfare	88
2.	Relationship between Irregular Warfare and Conventional Warfare	89
C.	Comparing Stability Operations (SO) and Major Combat Operations (MCO).....	90
1.	Qualitative Comparison of SOs and MCOs	90
2.	Comparison of Army Unit Types for SOs and MCOs	92
D.	The Essential Unity of Military Operations	94
1.	Army Doctrine.....	94
2.	The Three-Block War.....	94
3.	Hybrid Warfare.....	95
4.	Complex Operations.....	95
E.	Observations	96
6.	Providing Irregular Warfare Capabilities	97
A.	Introduction	97
B.	Irregular Warfare Capabilities.....	98
1.	Knowing the Area of Operations.....	98
2.	Forming Foreign Military and Police Forces	98
3.	Securing the People	99
4.	Winning Popular Support.....	100
5.	Improving the Economy	101
6.	Improving Governance.....	101
7.	Collaborating with Others	102
8.	Understanding the IW Concept	103
9.	Summary of IW Capabilities.....	103
C.	Capabilities for Foreign Military Operations	105
1.	Command and Control	105
2.	Movement and Maneuver Capabilities.....	106
3.	Fires Capabilities.....	106
4.	Intelligence Capabilities	107
5.	Protection Capabilities	107
6.	Sustainment Capabilities	108
7.	Irregular Warfare Capabilities.....	109
D.	Irregular Warfare Capabilities.....	110
1.	Knowledge of the Area of Operations.....	110
2.	Forming Foreign Military and Police Forces	112

3.	Securing the People	115
4.	Winning Popular Support	116
5.	Improving the Economy	117
6.	Improving Governance	117
7.	Collaborating with Others	118
8.	Understanding the IW Concept	118
E.	Unit Types that Provide IW Capabilities	118
F.	The Role of BCTs in Providing IW Capabilities	119
1.	Modifying BCTs for IW by Assigning Civil-Military Operation (CMO) Units	120
2.	Attaching Units to BCTs during Task Organization	122
3.	Forming Advise and Assist Brigades	122
4.	Placing IW Units in Direct Support of BCTs	123
5.	Placing Area-Oriented IW Units in General Support of BCTs	124
6.	Forming Task Forces for Operations that Include BCTs	124
7.	BCTs and IW Capabilities	125
G.	Observations	126
7.	Institutionalizing Irregular Warfare	127
A.	Introduction	127
B.	The Essential Disunity of IW-Related Programs	128
C.	Differentiating Between IW Capabilities for Special Operations Forces (SOF) and General Purpose Forces (GPF)	129
D.	Integrating IW Units in the Army	130
E.	Adopting a New Operational Concept for CM Units	133
F.	Observations	135
	Section III: Balancing Requirements and Resources	137
8.	A Schematic Model of the Army	139
A.	Introduction	139
B.	Developing the Model	140
C.	Observations	147
9.	Assessing the Composition of BCTs	149
A.	Introduction	149
B.	Mix of BCTs	149
C.	The Third Battalion Issue	151
1.	Counting Rules	151
2.	The Third Battalion Package	154
3.	Comparison of Variations	154
D.	Observations	158
1.	Uniform BCT Designs	158
2.	Two or Three Maneuver Battalions	159
3.	Designing the Army Force Structure	159
10.	Conducting Domestic Operations	161
A.	Introduction	161

B.	Homeland Defense Operations.....	162
1.	Overview of Homeland Defense Operations.....	162
2.	Ballistic Missile Defense Operations	163
3.	Land Defense Operations	164
4.	Observations on Homeland Defense	166
C.	Overview of Civil Support Operations.....	167
1.	Periodic Planned Support Operations.....	169
2.	Special Events	169
3.	Restore Public Health and Services Operations	170
4.	Disasters and Declared Emergencies	171
5.	Conduct of Response Operations	171
6.	Chemical, Biological, Radiological, Nuclear and High-Yield Explosive (CBRNE) Response.....	173
7.	Army Capabilities for Response Operations	174
8.	Army and DOD Civil Support Units	175
9.	National Guard Civil Support Organizations	177
10.	Summary of Army Specialized Civil Support Organizations	178
11.	The U.S. Army Corps of Engineers	179
12.	General Purpose Forces.....	180
D.	Responding to Catastrophic Emergencies	180
1.	Categories of Emergencies	180
2.	Catastrophic Emergencies	181
3.	The Nuclear Detonation Scenario	182
4.	Current DOD Posture for Response Operations.....	183
E.	Improving Army Capabilities for Response Operations	184
1.	Action 1. Change Laws, Policies, and Practices	185
2.	Action 2. Find Other Inexpensive Sources of Personnel.....	186
3.	Action 3. Convert Specialized National Guard Provisional Units to Permanent Units and Dedicate Them to the Civil Support Mission	188
4.	Action 4. Staff Dedicated Guard Civil Support Units with Personnel Assigned on Tours from Other Guard Units	189
F.	Observations	190
11.	Hedging Against a Major Combat Operation.....	193
A.	Introduction	193
B.	Elements of the MCO Hedge	193
1.	Deployment of the Rotational Force	193
2.	Brigade-Force Heavy Plugs.....	194
3.	A Strategic Reserve Force	195
4.	Planning for National Mobilization.....	196
C.	Observations	197
12.	Balancing the Expeditionary Force within Constraints.....	199
A.	Introduction	199
B.	Basic Assumptions	199
1.	Army Missions	199

2.	A Balanced Force Structure	200
3.	Resource Assumptions	200
C.	Analytical Approach.....	201
1.	Methodology	201
2.	Variables.....	201
3.	Stages in the Design Process	202
D.	The Base Case	202
1.	The Expeditionary Force	203
2.	Military Personnel Available for a Rotational Cycle	204
3.	Reserve Unit Differential	205
4.	Military Personnel Required for a Rotational Cycle	206
5.	Military Personnel Required for One Rotation	207
E.	The Full Spectrum Case	207
1.	Adding 37,000 Dedicated Civil Support Personnel	207
2.	Adding a Strategic Reserve Force	208
3.	Effect of the Addition of 22,000 Military Personnel.....	210
F.	Finding a Remedy	211
1.	Reducing Reserve Component Dwell Time	211
2.	National Guard Missions.....	212
3.	Results of the Analysis	212
4.	Implications of the Analysis	213
5.	Observations	214
6.	Data on the Army	215
7.	The Design and Mix of Brigade Combat Teams.....	215
8.	The Strength of the BCT Force Equivalent.....	216
9.	Final Observation	216

Appendices

A.	Operation Uphold Democracy Order of Battle	A-1
B.	Abbreviations	B-1
C.	References	C-1
D.	Illustrations.....	D-1

Introduction

This report presents work done by the Institute for Defense Analyses (IDA) during 2008 and 2009 for the Under Secretary of Defense for Personnel and Readiness on a Task Order titled “Relieving Stress on the Army.” This study effort has been somewhat unconventional. Rather than the usual study that presents a specific problem and results in a recommended solution, this study has been a journey of exploration with the general objective of finding ways to help the Army through a stressful period caused by waging two major conventional operations and numerous minor operations for a sustained period of time. The Sponsor’s guidance was to determine how the Army could conduct the full spectrum of operations within current limits on military personnel and funding. The study team set out to determine what that meant and then developed some ideas that could help the Army.

One important feature of this work is that it has been done in collaboration with the Army. The Sponsor wanted the Army to be involved both as a “customer” and as a participant. This was done, although with some limitations. Drafts of IDA working papers were sent to the Army Staff for comment, and several meetings were held at which the IDA Team discussed the issues with Army Staff representatives. For the most part, we were able to get accurate data from the Army. There were some exceptions to this, and in those cases, some of the basic data may be inaccurate or outdated. This phenomenon is due in large part to the dynamic nature of the data as the Army adjusted to meet the needs of the Combatant Commanders, and this made it difficult to obtain and retain current data. In a few cases, the Army was unable to provide some key data, and for those instances, the IDA Team relied on unofficial, open-source material.

This is the fourth year in which essentially the same IDA team has addressed Army issues. The previous studies covered some of the same issues as this one. However, this was a broader study. The products of the earlier work are listed in the bibliography.

The work was done more or less simultaneously, but for this report the various parts have been assembled in a more orderly manner. This report is organized into three sections.

Section I addresses the Modular Force. It provides some information on how the Army organizes for field operations, provides a historical perspective on the evolution of Army divisions, describes the development of the Modular Force, and explains the design of the Brigade Combat Teams (BCT), Modular Support Brigades, and functional support in a theatre of operations.

Section II examines the phenomenon called Irregular Warfare (IW). The first step is to establish a Spectrum of Operations and determine where IW fits into that spectrum. The several forms of IW found in official documents are shown, and their essential unity is demonstrated. From this, eight basic functions for the conduct of IW are asserted, and Army units that perform these functions are identified. Finally, a way to institutionalize the provision of IW capabilities is proposed.

Section III of the report is concerned with exploring how the Army can conduct Full-Spectrum Operations within current manpower and funding authorizations. A Schematic Model of the Army is developed to show how Army military personnel are allocated among the Army's missions. The mix of brigade combat teams and the number of maneuver battalions in them is addressed, and a tradeoff analysis is presented. The Army's role and resources for Homeland Defense and Defense Support of Civil Authorities is considered. A "heavy" force hedge against another major combat operation is offered for consideration. Finally, the ability of the Army to conduct Full-Spectrum Operations within constrained military personnel authorizations is considered, and policy changes to allow that are offered.

The findings and observations from the various sections and chapters have been presented in the form of briefings and working papers to the Sponsor, other elements of the Office of the Secretary of Defense (OSD), and Army officials. This report presents the entire body of work to provide a basis for action as appropriate and for further analysis as indicated.

This report does not have a final chapter with a consolidated set of conclusions or recommendations. Instead, the last portion of each section consists of a set of observations that summarize what the study team concluded about that topic. The summary to the paper does constitute an overview that integrates and considers what the research means for deliberations about the future doctrine and organization of the Army.

This paper is essentially a collection of smaller studies that all pertain to the Army but focus on different issues. Readers may, if they choose, read the chapters separately. Each chapter is more or less self-sufficient but also presented in a logical order. The common thread is that all of the chapters suggest ways that might help the Army to establish a force structure that will be better able to conduct current operations and also be ready for future operations.

Section I: The Army Today

The introduction of the Modular Force in 2004 caused a major change in the way the Army is organized for field operations. This section covers how the Modular Force came into being, what it is, and how it has performed in ongoing campaigns in Iraq and Afghanistan. This section is organized into three chapters.

Chapter 1 provides background information intended to help readers understand the content and implications of the material presented in subsequent chapters. The first part of the chapter covers the fundamentals of how the Army organizes for field operations, including echelons of field commands, command relationships, and mission-oriented task organization. The history of the evolution of Army divisions is summarized, with emphasis on the Reorganization Objective Army Division (ROAD) division and the Army of Excellence Division, which was in place prior to implementation of the Modular Force. The development of the Modular Force is presented. The Modular Brigade Combat Teams and the Modular Support Brigades are explained in detail, and the functional theater aspects of Modularity are also explained.

Chapter 2 addresses the operations of the Modular BCT and other elements of the Modular Force in Operation Iraqi Freedom (OIF) in Iraq and Operation Enduring Freedom (OEF) in Afghanistan in 2006 and 2007. Much of the emphasis is on how the BCTs functioned. Based on lessons learned reports, it is evident that field commanders routinely “task-organized” the BCTs and re-missioned other units as infantry in order to have more “boots on the ground.” The reports show that the Army in the field adapted to the situation and improvised to meet the needs of the operational commanders. A snapshot of the task organization of BCTs and maneuver battalions on 31 December 2007 reinforces this view. Finally, selected functions above the BCT echelon are discussed based on lessons learned. This chapter provides a limited view of the performance of the Modular Force. Much more work is needed (and is likely being done by the Army) to provide an experiential basis for making improvements to the Modular Force.

Chapter 3 derives a BCT Force Equivalent (BFE) from experiential data in Iraq. The advent of the Modular BCTs and their employment in Iraq made it possible to define a BFE to serve as a rule of thumb for estimating personnel strength for planning and design purposes. Previously, the Army had developed and used for many years a Division Force Equivalent (DFE) for force sizing and planning. In recent years, the experiential basis for the DFE became less relevant, and the DFE was sized and organized according to models based on doctrine and estimated workload. The campaign in Iraq provides an up-to-date

experiential basis for the BFE. This chapter explains how the new BFE has been calculated. Later, in Section III, the BFE will be used to estimate demands for support units in the Army.

1. Introduction to the Modular Force

A. Introduction

This chapter provides a basis for understanding the rest of the report by describing the development and implementation of the Modular Force from 2003 until today. The Modular Force is a major change from its predecessors. Much of it has been well received as a logical progression to meet new challenges. Some of it is controversial. In order to consider how the Army might want to continue to innovate, it is useful to have some idea as to where Modularity came from and why it came about. This chapter is intended to provide some fundamental information that will help readers understand the issues addressed in the other 11 chapters, particularly Chapter 2, that describes how well the Modular Force did during combat operations in Iraq and Afghanistan.

The rest of this chapter is organized into seven sections: Section B explains how the Army organizes for field operations. Section C summarizes the evolution of Army divisions. Section D tells about the development of the Modular Force. Section E describes the Modular Brigade Combat Teams. Section F describes the Modular Support Brigades. Section G addresses functional commands and brigades. Section H offers some observations on the Modular Force and its future.

1. Fundamentals of Army Field Operations

When the Army conducts field operations, it transforms its organizational structure from the one it has in garrison and for training. When not operating in the field, the Army organizes in a way that facilitates training and administration. Units are often assigned to organizations of the same type of units. When operating in the field, the Army forms mission-oriented task forces that combine different types of units to provide a particular capability. This section addresses the concept of task organization and explains how the operational commanders task-organize combat, combat support, and combat service support units to conduct operations in the field. Task organization is a product of the military decision-making process that helps commanders at all levels plan to accomplish their missions. It is done in accordance with Army doctrine for allocation of tactical and administrative responsibilities and capabilities in the echelons of Army organization in the field. It is also done in conformance with rules that establish the nature of the relationship between a supported unit and a supporting unit. Finally, an example of task organization for a minor contingency illustrates how task organization and the underlying employment doctrine are the keys to the conduct of operations.

2. Task Organization

The process by which available units are assembled and organized to accomplish a mission is called task organization. In the DOD lexicon, a “unit” is defined as an organizational entity assigned a Unit Identification Code (UIC) at the parent unit level designated by an “AA” code suffix. Army units are detachments, companies, battalions, and BCTs. There are five general kinds of units: combat, combat support, combat service support, personnel service support, and tactical headquarters. Units are authorized by tables of organization and equipment (TOE) and are designed to operate as a single entity, although they often operate in a dispersed mode. Sub-elements of units are often separated from the parent unit by means of a Derivative UIC. Most units are permanent elements of the Army Force Structure, but there are also provisional units formed for a particular function and a specific situation. The essence of task organization is to provide a commander the number and mix of units needed to accomplish the mission.

There is a difference between organizations and units. Units are the basic building blocks of the Army when it operates in the field. Organizations are sets of units led by a common commander. For the Army, the echelons of organization are, from the lowest level, a detachment or company, then upward to battalion, brigade, division, and corps. A battalion is a set of subordinate detachments or companies under a battalion commander and headquarters. A brigade is a set of subordinate battalions, companies and detachments under a brigade commander and headquarters. A division is a set of subordinate BCTs, brigades, separate battalions, companies, and detachments under a division commander with a headquarters. A corps is a set of subordinate divisions, separate brigades, battalions, companies, and detachments under a corps commander with a headquarters.

Another way to look at the task organization process is to understand that it creates forces. A force is defined as a set of units and organizations that are associated with a common mission. The product of task organization is a set of mission-oriented task forces at all echelons in a theater of operations.

3. Echelons of the Army

For field operations, the Army is organized into several echelons: companies, battalions, brigades, divisions, corps, field armies, army groups, and theater armies. Commanders at all but the highest level of command are responsible for tactical operations. The echelonment scheme establishes the levels at which commanders are also responsible for administrative support, which includes supply, transportation, maintenance, personnel sustainment, and administration. The evolution of the echelonment of the Army from World War I to the Modular Force is shown in Table 1. “T” indicates a tactical headquarters; “A” indicates an administrative headquarters; and a dash indicates that this kind of headquarters was not used at that time.

Table 1. Echelons of Army Combined Arms Organizations

Echelon	WWI 1918	WWII 1943	Korea 1950	ROAD 1962	NATO 1980	ODS 1990	Modular 2004
Theater Army	A	A	A	A	A	A	A
Army Group	T	T	-	-	T	-	-
Field Army	TA	TA	TA	TA	-	TA	T
Corps	T	T	T	T	TA	TA	T
Division	TA	TA	TA	TA	TA	TA	T
Brigade	T	-	-	T	T	T	TA
Regiment	TA	TA	TA	-	-	-	-
Battalion	T	T	T	TA	TA	TA	T
Company	TA	TA	TA	T	T	T	T

The theater army echelon is the highest level and is responsible for administration for all units in the theater; it has no tactical role. This headquarters is now called the Army Service Component Command (ASCC). The army group echelon has not been used for smaller recent campaigns and has been supplanted by a joint land forces headquarters at the theater level. The field army has been the basic level of field operations for tactics and administration except for the North Atlantic Treaty Organization (NATO) period and now for Modularity. During the period of emphasis on NATO, the field army level was not used because the corps of the NATO nations were responsible for national support and the corps became an administrative headquarters as well as a tactical headquarters. Throughout the entire period until now, the division was the tactical headquarters responsible for both tactical command and administrative support.

At the lower levels, the company was the basic element for administrative support until after the Korean War, when the regiment was eliminated in favor of a brigade headquarters that was tactical only, and the battalions became both tactical and administrative headquarters.

The basic design of the ROAD division that emerged in the 1960s and persisted in slightly different versions until the 1990s had a scheme in which every other echelon starting with the battalion was both tactical and administrative, with the intervening echelons being tactical only. The idea was that brigade and corps headquarters would play no role in administration and could focus on fighting the battles. During and after the Vietnam War, this arrangement gradually evolved so that by the time that Operation Desert Storm (ODS) occurred, the corps headquarters had assumed administrative functions. This meant that headquarters at every echelon (except brigade) above the company were both tactical and administrative. In the Modular Force, only the BCT and

other brigades have both tactical and administrative roles. The other echelons are tactical only.

4. The Military Decision-Making Process

The Military Decision-Making Process is the methodology by which operational commanders decide how to accomplish a mission. This process is initiated upon receipt of a mission from a higher commander. The first step is to address the assigned mission and determine what additional tasks are implied by the received mission. Once the mission has been restated and augmented, the commander issues a concept of how the operation should be conducted. The staff then works out a plan to implement the concept, often providing alternative courses of action for the commanders' consideration and decision. Once the decision is made, the staff prepares and the commander issues an operations order (either written or oral) that assigns missions to subordinate headquarters and units and prescribes the task organization for the operation. This process is carried on from higher to lower headquarters until the lowest level of team or individual is reached.

5. Command Relationships

The formation of task forces is accomplished by using several different kinds of command relationships that prescribe the way in which the units and intermediate organizations interact with subordinate and higher level organizations. The major parameters of these relationships are:

- Tasking – who can tell a supporting element what to do,
- Duration – the expected time period for the relationship,
- Support – who takes care of the supporting element, and
- Efficiency Reports – who rates the commanders and other leaders of the supporting element.

Table 2 shows the most important command relationships the Army uses to define the responsibilities of the supported organization and the parent organization.

Table 2. Command Relationships between Parent and Supported Organizations

Relationship	Tasking	Duration	Administrative & Logistical Support	Efficiency Reports
Organic	Parent	Permanent	Parent	Parent
Assigned	Supported	Temporary – Long Term	Supported	Supported
Attached	Supported	Temporary – Long Term	Supported	Parent*
Direct Support	Supported	Temporary – Long Term	Parent	Parent*
General Support	Parent	Temporary – Short Term	Parent	Parent
Area Support	Parent	Permanent	Parent	Parent

*Parent commander rates; supported commander endorses.

The order of intensity in the relationship goes from a strong relationship for organic and assigned elements to a weak relationship for general support and area support elements. In area support, supported units in a specified area of operations receive a particular kind of service from an organization that is assigned to cover that area. The range of these command relationships is from a permanent placement (organic) through short-term temporary relationship (direct support) to a situational relationship in which the task force receives support on an area basis.

- When a task force is formed in advance for the purpose of collective training or operations, the preferred relationship is assignment, which gives the supported unit commander the authority to assign missions to the supported unit and the responsibility to provide support to that unit.
- When a task force is formed in the field as the result of the planning process, the preferred relationship is attachment, which provides the same directive authority and support responsibility as assignment but can be changed by the next higher commander as desired. This relationship is used for all kinds of units, depending on circumstances. For example, an intelligence or terrain detachment that augments a tactical headquarters is usually attached to the headquarters company.
- When the burden of an additional unit exceeds the capability of the supported unit, a satisfactory arrangement can be provided by placing the supporting unit in direct support (DS). In this method, the supported commander can task the DS unit but the parent unit provides support and technical oversight. This kind of relationship is commonly used for fires and engineer support, in which a firing battery or sapper platoon is placed in direct support of a maneuver battalion within a BCT. It also is used to augment the BCT by making additional combat support capabilities available to the BCT commander without the additional burden of administrative and logistical support. For example, an engineer battalion can be placed in DS of a BCT to be an integral element of that BCT's operations but still supported by the theater engineer command.
- When a particular kind of support is in limited supply or it is desirable to retain some reserve capability to provide flexibility at a higher echelon, the preferred relationship is to place a support unit in general support (GS) of one or more supported units. In this method, the supported unit commander has the authority to task the GS units and establish priorities for the delivery of support, as well as full responsibility for administrative and logistical support and technical oversight.
- When there is a limited supply of a particular kind of support capability in a theater, it is prudent in some cases to provide that capability on an area basis. This means that a supported unit can benefit from a theater-wide system that is

organized on an area basis. In Iraq and Afghanistan, this is the way that some logistical support is provided. A BCT, battalion, or company operating in an area can rely not only on its own organic, assigned, and attached elements but also on those available from a support base or operating base. This is an effective way to provide administrative and general logistical support. It can also be a good way to provide specialized support, such as units that are irregular warfare enablers.

One of the problems with frequent changes in task organization is the matter of evaluating the performance of officers and non-commissioned officers. The personnel evaluation system is designed to operate in a steady-state situation in which evaluators have a long-term relationship with subordinates to be rated. Reports are often required annually, and although there are provisions for shorter-term reports, these are not as influential as the reports that cover a longer period. When a detachment, for example, moves around often as necessary to meet the needs of an operation, it is difficult to provide a fair rating of the performance of the detachment commander. This is not a new problem, and this is not the place to resolve it. It is useful, however, to recognize that this factor can inhibit flexibility in task organization.

6. Pre-Modular Task Organization

The pre-Modular Army was well designed for task organization. One example of the way that the Army was able to operate occurred for Operation Uphold Democracy, the intervention in Haiti in 1993. This operation was small enough that the order of battle can be presented on two pages, but it was also complicated enough to demonstrate how the Army was able to task organize for this operation.

The importance of this illustration of pre-Modular task organization is that it reveals the extent to which the Army mixed and matched, and added and subtracted small units to provide a tailored temporary organization for specific missions. The multi-functional approach to provision of combat service support and personnel service support at the battalion level with a mix of companies does not show the extent to which this tailoring occurred at the platoon and detachment level.

An abbreviated order of battle for this operation is shown in Figure 1, which lists only the headquarters commanded by generals or colonels. A detailed order of battle that shows all of the battalions, companies, and detachments is in Appendix A.¹

¹ Kretchik, Walter E., Robert F. Bauman, John T. Fishel, *Invasion, Intervention, 'Intervasion': A Concise History of the U.S. Army in Operation Uphold Democracy* (Fort Leavenworth, KS: U.S. Army Command and General Staff College Press, 1998).

Hqs, XVIII Airborne Corps (JTF-180)
Hqs, 10 th Mountain Division (JTF-190)
1 st Brigade Combat Team
2 nd Brigade Combat Team
Task Force Mountain (Div Artillery)
10 th Aviation Brigade
Task Force Raleigh (Special Forces)
16 th Military Police Brigade
525 th Military Intelligence Brigade
20 th Engineer Brigade
18 th Aviation Brigade
10 th Division Support Command
1 st Corps Support Command
46 th Corps Support Group
7 th Transportation Group
44 th Medical Brigade
18 th Finance Group
Joint Special Operations Task Force
Joint PSYOP Task Force

Figure 1. Order of Battle for Operation Uphold Democracy

The task organization of the 10th Mountain Division included elements of the 82nd Airborne Division, which had preceded the 10th briefly in the operation and the 24th Infantry Division, which provided a mechanized infantry company to provide some heavy capability for the operation. Elements of the Special Operations Forces and the Air Force were integral elements of the 10th Mountain Division Joint Task Force (JTF) 190. The Joint Special Operations Task Force (JSOTF), in contrast, included all kinds of Special Operations Forces (SOF), but segregated them by their parent services into task forces. The pre-Modular Force was the culmination of previous efforts to enable and practice flexible task organization that started with World War II and has continued to the present, with Modularity being the most recent manifestation.

B. Evolution of Army Divisions

This section traces the development of Army divisions leading up to the introduction in 2004 of the Modular BCTs. The Army emerged from World War II with infantry divisions that had three fixed regiments and armored divisions that had separate combat battalions and three flexible brigade level headquarters called combat commands. The Army fought the Korean War with regimental combat teams that were de facto combined arms teams with a mix of combat and support units. The Army abandoned its regimental structure in 1957 because it was deemed too inflexible, given that all of the

battalions in the regiment were permanently assigned to the regiment and could not be readily cross-attached away from the parent regiment. New division designs for several years followed two paths. Infantry and Airborne Divisions were organized into five “battle groups” that were intermediate in size between regiments and battalions. That path led to the Pentomic Division that was designed to operate on a nuclear battlefield in Europe. The other path led to an armored division with three combat commands and eight maneuver battalions. The adoption of the Flexible Response strategy in 1961 caused the Army to seek a single division design that could operate on the conventional battlefield and also conduct lesser contingency operations. The result of this new focus was the ROAD study, which advocated one basic design for infantry, airborne, mechanized, and armored divisions.²

1. The Reorganization Objective Army Division (ROAD) Division

The ROAD division was introduced in 1961 and implemented in the next two years. It was designed for flexibility and versatility, as the following comment illustrates:

The great feature of the ROAD division is its high degree of flexibility and versatility. That it owes to its three brigade headquarters and its maneuver battalions...Within this framework, the division commander has the means to tailor a task force around each of the brigade headquarters. As the circumstances suggest and his judgment determines, he can allocate to a brigade any mix of maneuver battalions, artillery, engineers, and other support elements for a specific mission. If the circumstances alter, he is free to adjust the composition of each brigade task force by regrouping his units. ROAD divisions provide commanders the kind of flexibility and freedom they must have to cope with swiftly changing combat conditions.³

The ROAD division had three organic brigade headquarters, nine to twelve maneuver battalions, a reconnaissance battalion, a division artillery (brigade equivalent) with four battalions, three to five combat support (CS) battalions or companies, and a division support command with three or more combat service support (CSS) battalions. For operations, the division was task-organized into three brigade task forces with two to five maneuver battalions, an artillery battalion, an engineer company, and other support units attached or in direct support. ROAD divisions fought in Vietnam and set the pattern for subsequent variations until the adoption of the Modular Force. The rationale for the ROAD division is explained as follows:

The inclusion of brigades and reinstitution of battalions in the ROAD division reduced the span of control of the division commander from the Pentomic division. However, it should be noted that the brigades are

² Wilson, John B., *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades* (Washington, DC: U.S. Army Center of Military History, 1998). Chapters X and XI cover this era.

³ Pizer, Vernon, *The United States Army* (New York: Frederick A. Praeger, 1967), 40.

performing essentially the same function accomplished by the old regiment. Further, the brigade possesses a flexibility of attachment and detachment of battalions never achieved by the regiment. The regimental structure of World War II and the Korean War was inflexible, i.e., battalions were permanently assigned to the regiment. Today, the brigade has no permanent battalions—with its headquarters and headquarters companies as the division base, it receives battalions within the division as required by the mission. The Brigades of the division are, in essence power handles to which the battalions (tools) are attached for operations. The division base is essentially a master power handle to which the brigades are attached.⁴

The ROAD division design was modified several times after its introduction to conform to new threats, new weapons, and new tactics. It was used in Vietnam where airmobility changed the way the Army operated and aviation was incorporated into the divisions. After the end of the Vietnam War, the division was first modified to wage a major conventional war in Europe. Later, the division was modified to adjust to new circumstances and new challenges.

From 1975 to 1983, the Army considered and experimented with several variations of the ROAD model. In 1983, the Army formed small light infantry divisions to improve strategic deployability and strengthened its heavy divisions (with fewer maneuver battalions [10 vice 11] but four companies per battalion) to face the Warsaw Pact threat in Europe. The result of this effort culminated in the adoption in the mid-1980s of the Army of Excellence (AoE) division.⁵ AoE was modified as a result of Force XXI. Maneuver battalions went from four to three companies. This design persisted with minor variations after the end of the Cold War.

2. The Army of Excellence (AoE) Division

The divisions that began Operation Iraqi Freedom in 2003 were organized in the Army of Excellence (AoE) design.⁶ The AoE division was designed to counter “worst case” threats like those faced in the Cold War that called for “fighting a large scale conventional operation while maintaining flexibility to changes in peer-competitor tactics.”

⁴ Ney, Virgil, *Evolution of the U.S. Army Division 1939-1968*, Technical Operations, Incorporated, Combat Operations Research Group, under contract No. DAAG-05-67-C-0547 for Headquarters, United States Army Combat Developments Command, Fort Belvoir, Virginia, ix.

⁵ *Maneuver and Firepower*, Chapter XIV.

⁶ III Corps was experimenting with lighter FORCE XXI division design, which had retained the brigade-tailoring features of the AoE division.

The AoE division was organized into the sub-organizations displayed in Figure 2:

- Division headquarters and headquarters company
- Three brigade headquarters and headquarters companies
- Nine maneuver battalions: infantry, mechanized, or tank
- Reconnaissance squadron or battalion
- Division artillery brigade
 - Three direct support field artillery battalions
 - One general support field artillery battalion
- Aviation brigade
 - Two attack helicopter battalions
 - One general support helicopter battalion
- Air Defense battalion
 - Three direct support batteries
 - One general support battery
- Military Intelligence Battalion
 - Three direct support companies
 - One general support company
- Engineer brigade
 - Three combat battalions to provide direct support to brigades
- Signal battalion
 - Three direct support companies
 - One general support company
- Chemical company
- Military Police company
- Division support command
 - Three multifunctional forward support battalions
 - One main support battalion

Figure 2. The Army of Excellence (AoE) Notional Division

The AoE division was organized so that support units could be attached or placed in direct support of each of the three organic brigade headquarters, with general support units for the rest of the division and to provide back-up support for the brigades. For operations, the AoE division was task-organized into BCTs, one version of which is shown in Figure 3.

AoE Heavy Brigade Combat Team

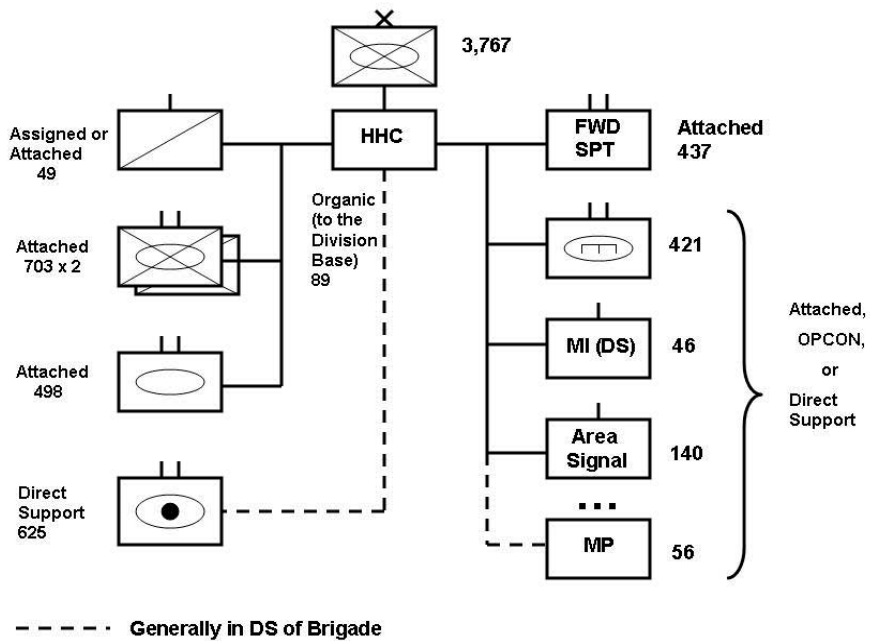
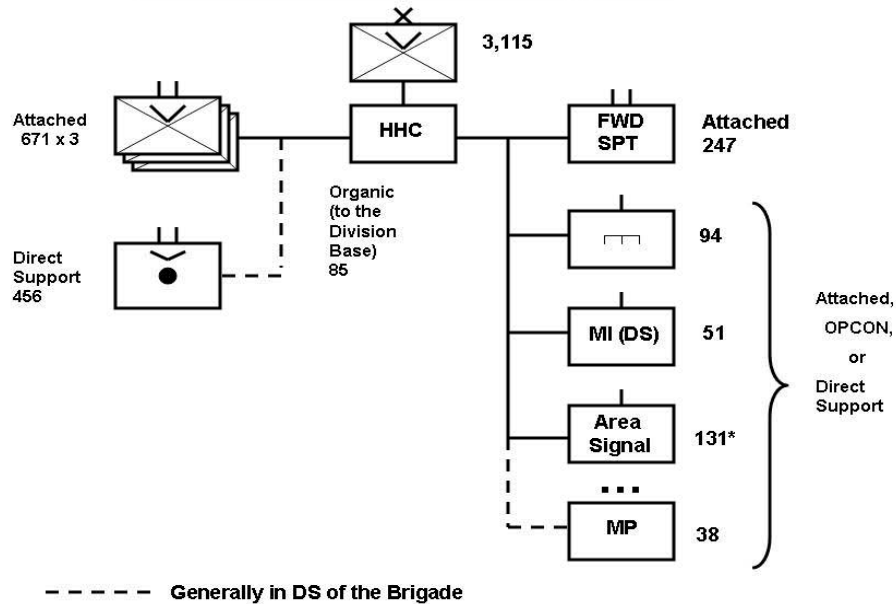


Figure 3. The AoE Heavy Brigade Combat Team

AoE Air Assault Brigade



* Estimated as the Division Signal Battalion is not organized, because of MSE, with three area support companies, on the basis of one per brigade area.

Figure 4. The AoE Air Assault Brigade

The AoE division also had an aviation brigade or air assault brigade that could provide support to the maneuver brigade combat teams or conduct independent

operations, such as reconnaissance or screening a flank. Figure 4 shows the organization of an air assault brigade.

3. Prelude to Modularity

After the end of the Cold War, the AoE division was deemed to be too large to move quickly into a regional combatant command and commence operations immediately upon arrival. In its 2001 *Army Posture Statement*, the Army reported to the Congress that, from 1989 to 1999, it had deployed forces for smaller scale contingency (battalion-sized or larger) operations 49 times. Specifically, the Army reported that “Since 1989, the average frequency of Army contingency deployments has increased from one every four years to one every fourteen weeks.”⁷

In that same ten-year time period, each of the Services had faced decreased personnel ceilings, reduced budgets, and increased commitments. During that period, the Joint Chiefs of Staff published Joint Vision 2010, and later Joint Vision 2020, to guide Service transformation initiatives. The Joint goal was, and remains, the creation of a force that is “...dominant across the full spectrum of military operations—persuasive in peace, decisive in war, preeminent in any form of conflict.”⁸ Joint Vision 2020 provided, in part:

The overarching focus of this vision is full spectrum dominance—achieved through the interdependent application of dominant maneuver, precision engagement, focused logistics, and full dimensional protection. Attaining that goal requires the steady infusion of new technology and modernization and replacement of equipment. However, material superiority is not enough. Of greater importance is the development of doctrine, organizations, training and education, leaders, and people that effectively take advantage of the technology⁹ Joint Vision 2010 identified technological innovation as a vital component of the transformation of the joint force. Throughout the industrial age, the United States has relied upon its capacity for technological innovation to succeed in military operations, and the need to do so will continue. It is important, however, to broaden our focus beyond technology and capture the importance of organizational and conceptual innovation as well...Leaders must assess the efficacy of new ideas, the potential drawbacks to new concepts, the capabilities of potential adversaries, the costs versus benefits of new technologies, and the organizational implications of new technologies.¹⁰

⁷ “United States Army Posture Statement FY 01,” presented to the Committees and Sub-committees of the United States Senate and the House of Representatives, Second Session, 106th Congress, February 2000, 2.

⁸ Joint Vision 2020, 1.

⁹ Ibid., 3.

¹⁰ Ibid., 10 and 11.

The Army described the dilemma it had faced in trying to meet regional combatant command commander needs with its 2003 division-based structure as follows:

The emergence of Joint expeditionary warfare as the norm calls for adaptation in the Army. Today's operations require Army forces to respond rapidly to Regional Combatant Commanders (RCC) with forces that move quickly and commence operations immediately upon arrival in distant theaters of operations. Every RCC has employed Army forces in the past five years and in every case the Army has had to modify its corps, division and specialty troop organizations to meet the RCC's requirements. To satisfy operational demands as different as those of the Balkans, Afghanistan and the Philippines, the Army has had to dismantle or reorganize its units to suit them for the tasks at hand. This difficulty in using existing formations, coupled with the need to employ land forces immediately with little time to reorganize after deployment, made the need for more deployable Army forces unmistakable.¹¹

Once again, the Army would adapt its organization and tactics to deal with these new demands—this time, with the Modular Force.

C. Development of the Modular Force

In December 2003, after the major combat phase in Iraq had concluded, the Army remained engaged both there and in Afghanistan, countering an irregular warfare threat and conducting stability, security, transition, and reconstruction (SSTR) operations throughout both countries. General Peter Schoomaker, then the newly-appointed Army Chief of Staff, published a 15-page booklet titled "The Way Ahead; Our Army at War Relevant and Ready," at the end of which he laid out 16 "Immediate Focus Areas...to channel Army efforts on winning the global War on Terrorism and increasing the relevance and readiness of the Army." Two of these focus areas were as follows:¹²

- Modularity to "create modular capabilities-based unit designs"
- Force Stabilization to "ensure unit stability and continuity and provide predictability to soldiers and their families"

The first of these focus areas resulted in the Modular Force. The second resulted in the Army Force Generation (ARFORGEN) Process.

Modularity established a brigade-based Army to supplant the previous division-based force structure. However, the modular BCT designs were not merely "mini-

¹¹ Draft Modularity O&O Plan, Part I as of 3 April 2004.

¹² Schoomaker, General Peter, "The Way Ahead: Our Army at War Relevant and Ready," December 2003.

division” organizations as Figure 5 might indicate.¹³ The modular BCT is quite different from the AoE brigade task forces.

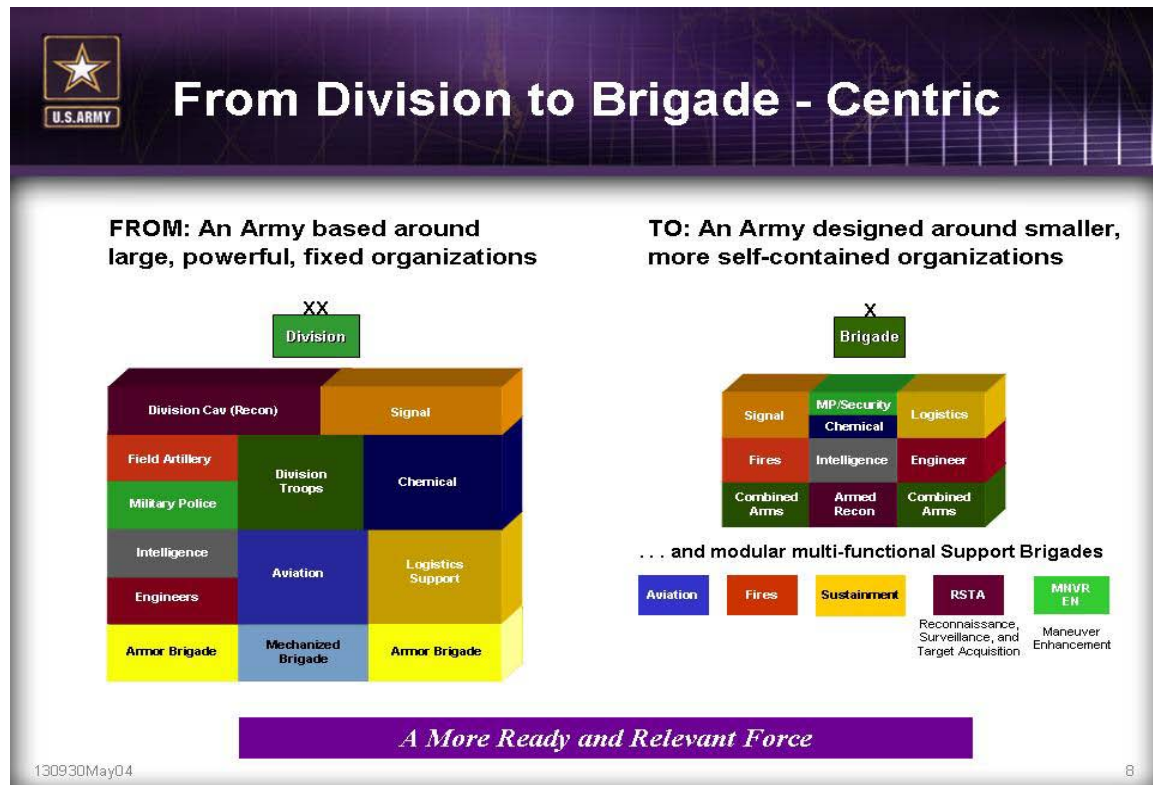


Figure 5. The Initial Modular Brigade-Based Concept

Division and corps headquarters were retained to command and control the BCTs and the supporting multi-functional and functional brigades. BCTs or other brigades could be assigned or attached to these tactical headquarters as shown in Figure 6.

¹³ Slide extracted from briefing titled “Why We are Changing the Army,” DTG 130930 May 2004.

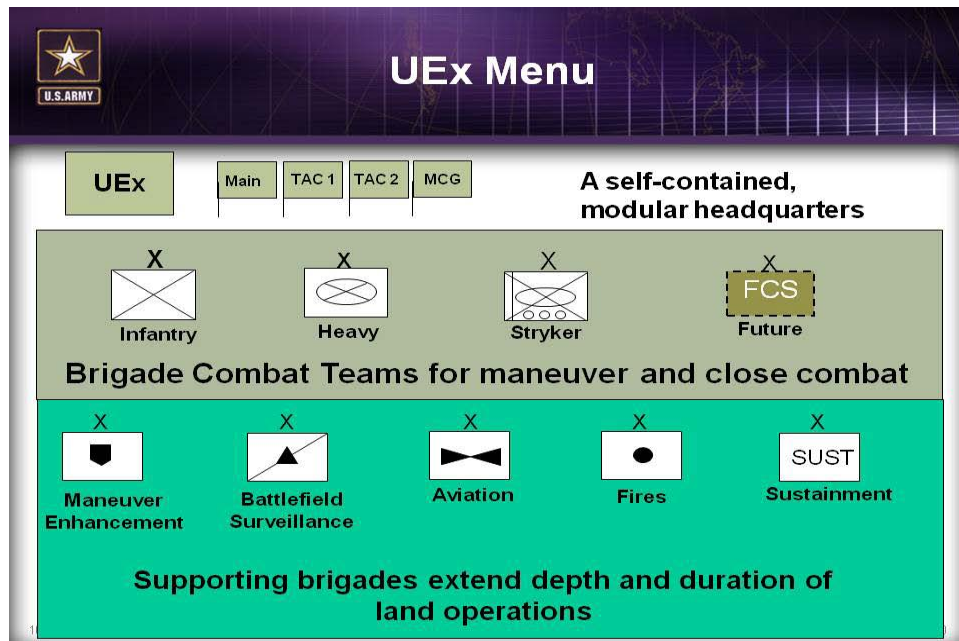


Figure 6. Initial Command and Control for BCTs and Other Brigades

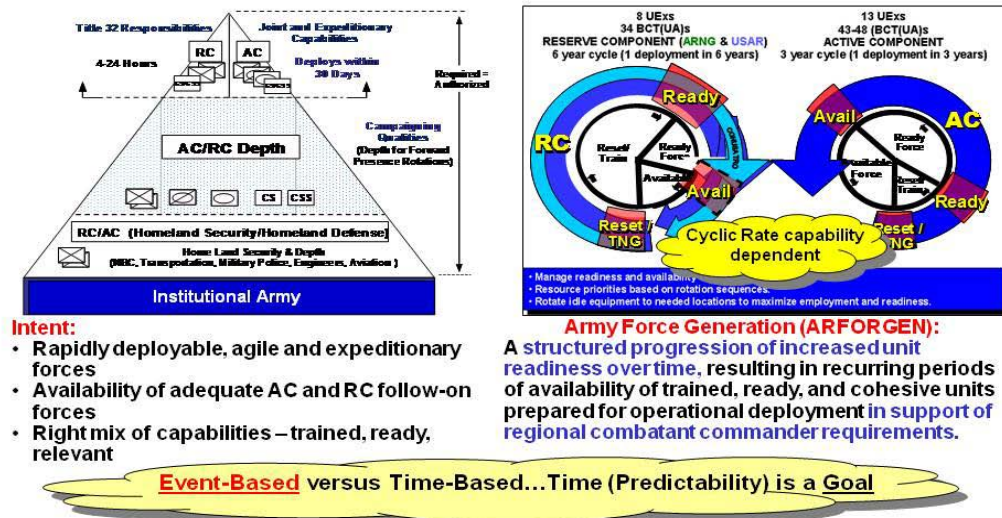
Force Stabilization led to the establishment of a unit replacement system that was designed to keep soldiers and their leaders together for at least three years to promote unit cohesion. In order to provide a degree of predictability to unit deployments, the ARFORGEN model established a system of cyclical readiness in which Active Component (AC) BCTs and other units would deploy or be prepared to deploy for one year out of three, and Reserve Component (RC) BCTs and other units would deploy for one year out of six. This process is illustrated in Figure 7.¹⁴

¹⁴. Extracted from Briefing titled "Army Force Generation within Joint Force Provider," by General Dan K McNeill, Commander, U.S. Army Forces Command, 19 September 2005.



Structuring The Force → Generating Ready Forces

UNCLASSIFIED



UNCLASSIFIED

As Of 150800AUG05

5



FORSCOM



Figure 7. The Initial Army Force Generation Process (2005-2007 Timeframe)

The figure to the left in Figure 7 was extracted from General Schoomaker's "The Way Ahead; Our Army at War Relevant and Ready" and that at the right describes the ARFORGEN model as it eventually was institutionalized in Army Regulation 350-1.¹⁵

Although the stated intent of the Army's reorganization was to improve the ability of Army units to deploy rapidly, the driving force behind Modularity was supply and demand. Demand for Army brigade-sized units in Iraq, Afghanistan, and the rest of the world was greater than the available supply within the AoE force structure, particularly if the stabilization goals embodied in the ARFORGEN process were to be attained. In 2003, the Active Army had 33 combat brigades in 10 Army divisions, two cavalry regiments, and a separate brigade. The Army determined that these were too few to sustain the campaigns in Iraq and Afghanistan as required by ARFORGEN and that there would have to be from 43 to 48 Active brigades as well as 34 National Guard (ARNG) combat brigades as shown in Figure 8.¹⁶ There was a risk associated with reorganizing the Army while forces were fighting a protracted war, but the Army's senior leadership acknowledged that risk and proceeded.

¹⁵ Army Regulation 350-1, Training: Army Training and Leader Development, Headquarters, Department of the Army, Washington, D.C., 3 August 2007, Paragraphs 1-4 and 1-5.

¹⁶ Extracted from the Briefing titled "Modular Forces Overview," presented by Colonel Rickey E. Smith, Director, Futures Center Forward, 19 January 2005.

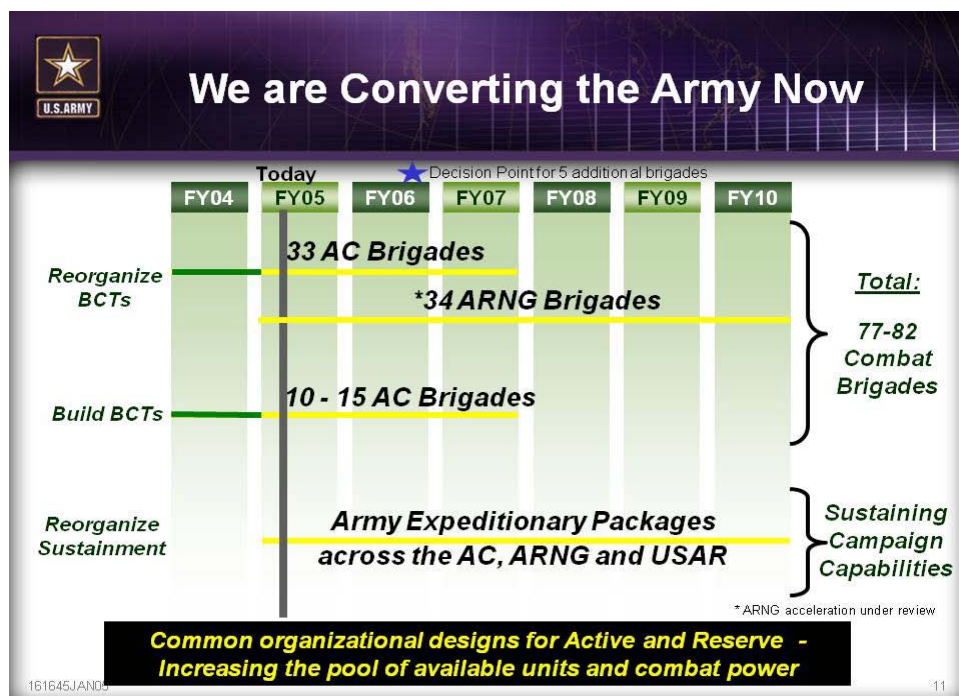


Figure 8. Army Approach to Reorganization

General Schoomaker wanted to build up to 48 modular brigades in the Active Component (AC) to make more brigades available for deployment, to make Army forces smaller and more deployable, and to add stability to the force. He ordered each division to reorganize from three to four brigades within existing authorizations. The 3rd Infantry Division was the first to convert to the four-brigade configuration, followed by the 101st Air Assault Division. Based on the experience gained in these conversions, the entire Army—AC and ARNG—was reconfigured to form Modular BCTs, and other elements of the Modular Force.

Modularity did not appear on the spur of the moment. The Combined Arms Support Center had for many years designed its combat service support units to be able to operate in self-contained modules (sections or platoons), and most CSS battalion headquarters had converted to be multi-functional during ODS. The Training and Doctrine Command (TRADOC) had published in 1995 a concept of modularity, as a means of depicting the force design objective of matching force capability to force needs.¹⁷ That early concept defined modularity as an organizational construct geared toward optimizing the “capability” of the force. Though “capability” was described more in a philosophical than an organizational context in the TRADOC pamphlet, matching the capability of land

¹⁷ TRADOC Pamphlet 525-68, Concept of Modularity, 10 January 1995.

forces to the needs of regional combatant commanders was recognized early as a major objective of the reorganization that began in earnest in 2004.

The Army had traditionally relied upon the Total Army Analysis (TAA) process for the design of headquarters, staffs, commands and functional units. Though this process has been much maligned, its underlying precepts remain consistent with modern management theory. The Army's organizational system is described as follows:

“...the Army can be considered an open organizational system with three distinct components: the production, combat, and integrating subsystems. Each of these has tasks to accomplish, each operates in a given environment, and each requires and acquires resources. Because of the size and complexity of the Army and its tasks, the organizational structure needed to accomplish these tasks requires a management approach that gives the Army as much flexibility as possible...while also maintaining the command and control relationship that is needed in the military. Although structured along the traditional classical organizational design, with the complexity of tasks being given to the Army today, a more fluid design is appropriate...This design...conceptually rests on the idea that to have an effective design for an organization there must be a “goodness of fit” between the structure and the conditions of the external environment of the organization...this design model recognizes that organizations like the Army exist as “open systems” and thus must be structured in such a way as to allow the system to address those external factors in an appropriate manner, not in a one way fits all situation.”¹⁸

There has been much discussion about the number of maneuver battalions in the infantry and heavy BCTs. The decision to have two maneuver battalions is attributed to a desire to have more brigades. However, the following extract from the Army's original Task Force Modularity report provides a more comprehensive and balanced discussion of the merits of the case.¹⁹

...The Task Force Modularity Studies examined designs with three battalions as well and these invariably performed much better than both the base case brigade combat teams and the two-battalion designs. In order to increase the number of brigades available to the Army without substantially enlarging the force, however, force designers opted for the two-battalion brigade. However, it is important to record for the benefit of long term planning what made the performance of the three-battalion modular brigades so much better.

First, all other factors being the same, there was a straight-line correlation between the number of combat platoons and the level of success. For

¹⁸ “Army Organizational Structure,” *How the Army Runs—A Senior Leader Reference Handbook*, Carlisle: U.S. Army War College, 2001-2002), Chapter 3.

¹⁹ Modular Brigade Combat Teams: Task Force Modularity White Paper, Part III, (7/7/04 Draft), 17.

reasons more fully explained in the next chapter lethal precision firepower and small tactical ground elements are not fungible. New kinds and sources of firepower surely add to mission potency, but exploiting offensive maneuvers and fighting sustained operations still requires large numbers of infantry squads and fighting vehicle crews. As these elements are added to this design, there will inevitably be a “knee” in the curve as diminishing returns on investment take effect, but no “knee” was evident in three battalion designs.

Second, the third battalion also provides endurance. Engaged battalions will be difficult to replenish during offensive missions. Brigades will not be able to rotate battalions as easily. Tired troops make more mistakes and take more casualties. As a consequence, brigades will need to be rotated more frequently, especially in urban combat.

Finally, the flexibility a third battalion provides may be even more important. When both battalions are decisively engaged, brigade commanders will find it very difficult to react rapidly to new dangers or opportunities. With the brigade fully committed, UEx commanders will have to act sooner and commit their own reserves earlier than would be necessary with larger brigades.

In most two battalion cases, commanders traded the reconnaissance potential of some or most of the reconnaissance troops for the flexibility a third maneuver element provides. This diminished their ability to find and track the enemy, slowed progress toward mission success, diminished the number of engagements fought from a position of advantage, and reduced the number of targets engaged with precision fires from a stand-off.

Adding the third battalion in the long run would increase the value of the current investment and the fighting qualities of the brigades. It would buy half again the combat fraction, increase endurance, and gain flexibility. Because these advantages combine synergistically rather than linearly, brigade mission potency would increase (sic) by a far greater fraction than the cost of the addition. Relatively few soldiers need to be added to the brigade overhead to provide support for an additional maneuver battalion. Adding a battalion to the Infantry brigade would make it somewhat larger but much more capable than the current divisional brigade base case. Adding one to the Heavy brigade would make it nearly the same size but probably half again as capable. Mission potency per ton and unit of cargo space would increase even more.

The primary criticism of the two-battalion design has been that while BCTs with two maneuver battalions do increase the numbers of brigades for deployment, each of these brigades is less capable than a BCT with three maneuver battalions, despite Army claims to the contrary that new technology enhances the capability of the smaller BCTs. The Army’s Modularity Task Force, instead of refuting the critics, seemed to reinforce them when it reported:

Assuming some risk in the short term, Army leaders have reduced the number of combat maneuver battalions in the new brigades from three to two, but have added a small cavalry squadron to the organization to assure its ability to develop combat information. Adopting this new design will give the Army more brigades, create greater standardization among those brigades and accelerate the speed of employment of land combat forces...Despite their smaller size, the BCT Maneuver Brigades will be equally effective in combat missions, more capable of stability operations and far better at interacting with other service tactical elements of the Joint Force. Because they are smaller than division-based BCTs the Army will be able to field them in greater numbers and therefore meet RCC demands more effectively while also ameliorating the Army's high operational tempo.²⁰

As the passage above indicates, the modularity task force, the designers of the BCTs, recognized that a brigade with three battalions was “much better” than one with two battalions. Constrained resources—e.g., the need to form four brigades from an AoE division with enough assets for three—appears to have been the deciding factor behind the two battalions per brigade design. An important influence was the immediate need for deployable combat brigades within the two combat zones within the U.S. Central Command.

General Schoomaker formed the modularity task force in September 2003, and was presented with and approved preliminary designs in January–February 2004. The modular BCTs were born shortly thereafter.

Soon after General Schoomaker had approved an early version of the Heavy BCT (HBCT) design, the 3rd Infantry Division (Mechanized) was ordered to reorganize into the new modular configuration. The Division quickly reorganized, field tested the new designs from 26 March 2004 to 10 April 2004 (~2 weeks) at the National Training Center, and in January 2005 began deploying to Iraq in modular form. On 16 September 2004, units of the 101st Air Assault Division, which had redeployed from Iraq earlier that year, began reorganizing into the approved infantry modular force structure. In late 2005, the 1st and 2nd Brigades of that Division deployed to Iraq in the new configuration. Obviously, the deployment timelines were more compressed than the ARFORGEN model specified for pre-deployment training and other deployment preparations. However, the field training that these two divisions accomplished prior to deployment to

²⁰ Draft Modularity O&O Plan, Part I, as of 3 April 2004, 13. The smaller size assertions were incorrect as the comparative figures below illustrate.

Iraq, constituted the field testing conducted by the Army to confirm the organizational designs.²¹

D. Modular Brigade Combat Teams (BCTs)

There are three types of BCT in the Modular Force: the Infantry BCT (IBCT), the Heavy BCT (HBCT), and the Stryker BCT (SBCT). The IBCT and HBCT are new designs based on Modularity principles. The SBCT was designed originally to be a separate brigade under the AoE design and is significantly different from the other two BCTs. In order to understand the nature of the BCTs, each will be presented and subsequently all will be compared and contrasted. Figure 9 shows the basic elements of each of the three kinds of BCTs.

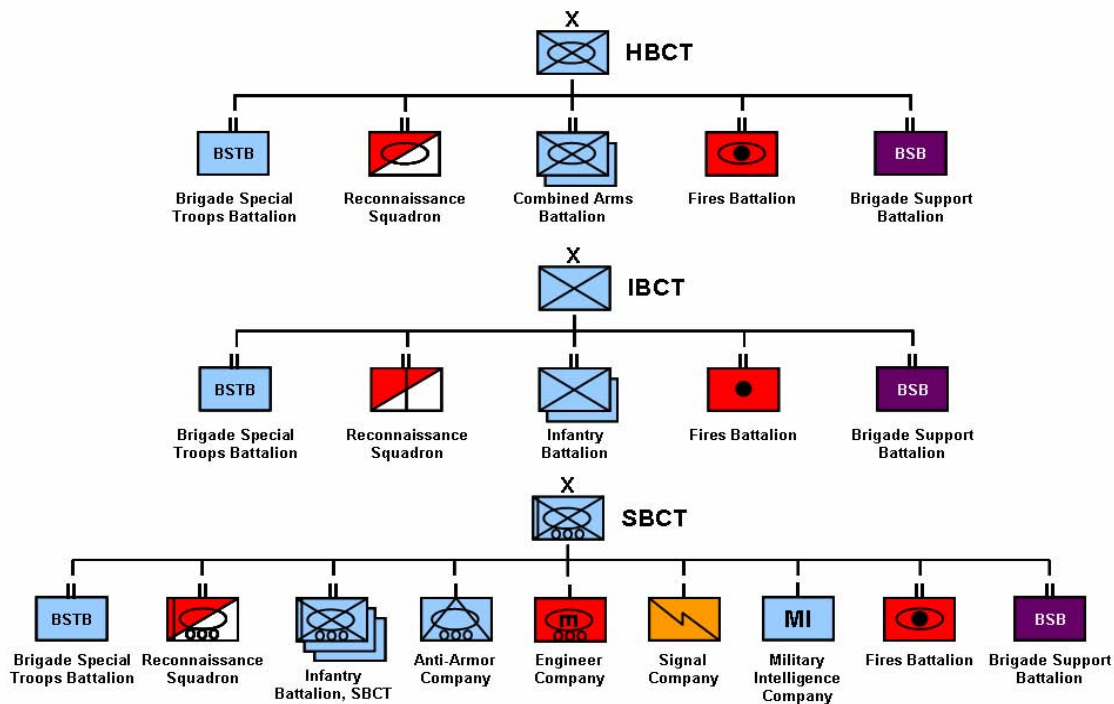


Figure 9. Modular Organizational Designs for Brigade Combat Teams (BCTs)²²

²¹. The analytical underpinnings of the modular designs relied on computer simulations and table top games with senior general officer players conducted mainly by the U.S. Army Training and Doctrine Command's TRADOC Analysis Center (TRAC), at Fort Leavenworth.

²². This figure is extracted from Army Transformation—Report to the Congress of the United States, Improving the Capabilities of Soldiers to Conduct Full-spectrum Joint Operations and Defend the Nation in the 21st Century, February 2007.

1. Elements of the Modular BCTs

One of the goals of the Modular Force is to promote uniformity among the units of the same unit type. Until the modular reorganization, many units operated under unique modified tables of organization and equipment (MTOE), and each could be slightly different from other units of the same type. The Modular HBCTs and IBCTs have a common design with the following sub-elements:

- **Brigade Special Troops Battalion (BSTB).** The BSTB has a brigade headquarters and headquarters company, signal company, military intelligence (MI) company, engineer company, and military police (MP) platoon. More detail on this battalion is provided below.
- **Reconnaissance, Surveillance, and Target Acquisition (RSTA) Battalion.** The IBCT RSTA battalion has two motorized reconnaissance troops in High Mobility Multipurpose Wheeled Vehicles (HMMWV) and one dismounted reconnaissance troop. The HBCT has an armored reconnaissance battalion with three reconnaissance troops in armored scout vehicles and a mounted surveillance troop with sensors and unmanned aerial vehicles (UAV).
- **Two maneuver battalions.** The IBCT infantry battalion has a headquarters and headquarters company, three rifle companies, and a weapons company. The HBCT combined arms battalion has a headquarters and headquarters company, two mechanized infantry companies, and two tank companies.
- **The IBCT and HBCT Fires Battalion** has two batteries of eight howitzers, a target acquisition platoon, and a surveillance platoon.
- **The IBCT and HBCT Support Battalion** has four forward support companies designed to support each maneuver battalion, the fires battalion, and the RSTA battalion, and a distribution company, a maintenance company, and medical company to support the entire brigade. More detail on this battalion is provided below.

The SBCT is organized similarly to a separate brigade of the AoE era. It is larger than the HBCTs and IBCTs and, most notably, is organized with three rather than two maneuver battalions. Because of this, the fires brigade has three firing batteries, one for each maneuver battalion. Another difference is that each of the three maneuver battalions has some organic support capabilities, so that there are no forward support companies in the Stryker brigade support battalion. Also, the SBCT does not have a brigade troops battalion, and the combat support functions of signal, engineer, and military intelligence elements are structured as separate companies. The SBCT also has a separate anti-armor company.

The basic elements of each of these types of BCTs are shown in Table 3.

Table 3. Composition of BCTs

Battalion Type	IBCT	HBCT	SBCT
Brigade Special Troops Battalion	Hqs & Hqs Company Signal Company MI Company Engineer Company MP Platoon	Hqs & Hqs Company Signal Company MI Company Engineer Company MP Platoon	Hqs & Hqs Company Signal Company MI Company Engineer Company Anti-Armor Company
RSTA Battalion	Hqs & Hqs Company Motorized Recon Company Motorized Recon Company Dismounted Recon Co Surveillance Company	Hqs & Hqs Company Motorized Recon Company Motorized Recon Company Motorized Recon Company Surveillance Company	Hqs & Hqs Company Recon Company Recon Company Recon Company Surveillance Company
Maneuver Battalion	Hqs & Hqs Company Rifle Company Rifle Company Rifle Company Weapons Company	Hqs & Hqs Company Mech Infantry Company Mech Infantry Company Tank Company Tank Company	Hqs & Hqs Company Infantry Company Infantry Company Infantry Company
Maneuver Battalion	Hqs & Hqs Company Rifle Company Rifle Company Rifle Company Weapons Company	Hqs & Hqs Company Mech Infantry Company Mech Infantry Company Tank Company Tank Company	Hqs & Hqs Company Infantry Company Infantry Company Infantry Company
Maneuver Battalion			Hqs & Hqs Company Infantry Company Infantry Company Infantry Company
Fires Battalion	Hqs & Hqs Company Firing Battery (105mm) Firing Battery (105mm) Target Acquisition Platoon TUAV Platoon	Hqs & Hqs Company Firing Battery (155mm) Firing Battery (155mm) Target Acquisition Platoon TUAV Platoon	Hqs & Hqs Company Firing Battery (155mm) Firing Battery (155mm) Firing Battery (155mm) Target Acquisition Platoon TUAV Platoon
Brigade Support Battalion	Hqs & Hqs Company Distribution Company Maintenance Co Medical Company Fwd Support Co (Man Bn) Fwd Support Co (Man Bn) Forward Support Co (RSTA) Forward Support Co (Fires)	Hqs & Hqs Company Distribution Company Maintenance Co Medical Company Fwd Support Co (Man Bn) Fwd Support Co (Man Bn) Forward Support Co (RSTA) Forward Support Co (Fires)	Hqs & Hqs Company Distribution Co Maintenance Co Medical Company

The Army standardized internally the personnel and equipment of each type of BCT. This was done in part to permit units to rotate onto a common pre-positioned set of equipment. That feature made yearly deployment and redeployment of troops fighting the protracted irregular wars in Iraq and Afghanistan easier and less expensive in time and lift assets than it would have been if each unit had to deploy its equipment set.

2. Brigade Special Troops Battalions

When the move was made from a division-based force to a brigade-based force, one of the challenges was to find a way to organize the combat support functions that in the previous design were part of the division base. In the former design, artillery, air defense, engineer, signal, and military intelligence capabilities were provided by fixed battalions whose sub-elements were commonly placed in direct support or general support of the maneuver brigades of the division. Military police, chemical, and some other capabilities were provided by separate companies reporting to the division headquarters. The Modular Force moved part of these combat support capabilities into a Special Troops Battalion in the BCTs and created new Modular Support Brigades for others.²³ The Special Troops Battalion provides a battalion commander and staff to coordinate the provision of combat support functions within the BCT.

The Signal function is dispersed into signal companies or detachments assigned to BCTs and other brigade and higher headquarters, often as an organic element of their brigade special troops battalions. The Signal Network Company of an IBCT or HBCT establishes networks that support brigade operations and integrates with division, corps, and theater networks.²⁴ The company is authorized 72 personnel. It has 36 vehicles, two telephone systems, two net control stations, two satellite terminals, and numerous radio sets. The Signal Network Company of an SBCT is organized under the same TOE but is authorized only 70 personnel²⁵. The signal company can provide area support for a BCT, but its strength and equipment are stretched significantly when the BCT's area of responsibility is expanded as a result of the attachment of additional maneuver battalions. Regardless of retransmission assets, maintaining a coherent network over extended ranges requires augmentation by units from the theater signal command to provide connectivity to brigades, divisions, and corps.

Within the BCTs, Military Intelligence (MI) support is provided by a company in the BSTB that provides "timely, relevant, accurate and synchronized Intelligence, Surveillance, and Reconnaissance (ISR) support to the BCT commander, staff and

²³ Smith, Colonel Rickey, "The Army Modular Force," 23 February 2005, is the basis for the summary descriptions in the following paragraphs.

²⁴ SRC 77405GFC21.

²⁵ SRC 11307G000.

subordinates during the planning, preparation, and execution of multiple, simultaneous decision actions on a distributed battlefield.”²⁶ The MI companies of the IBCT and HBCT are authorized 72 personnel and have 28 trucks, satellite communications, human intelligence (HUMINT) collection teams, and a Tactical Unmanned Aerial Vehicle (TUAV) (Shadow) platoon with one TUAV. The Stryker MI Company is authorized 79 personnel and has the same mission with a slightly different mix of capabilities. The capabilities of these MI companies can support the BCT but may not be sufficiently robust to provide adequate support when additional maneuver battalions are attached to the BCT. Additional HUMINT teams would be needed to support additional maneuver battalions. Augmentation is provided by a Battlefield Surveillance Brigade (BfSB) that has an organic base consisting of a military intelligence battalion and a brigade troops battalion, with a headquarters and headquarters company, a signal company, a support company, and a long range scout detachment. Added capability can be provided by attaching a SOF element, a UAV company, a helicopter company, or other units to the BfSB.

Each BCT has an organic engineer company in the special troops battalion. The initial version of the HBCT had an engineer company in each of the two combined arms battalions, but this has been changed to have one larger engineer company in the special troops battalion. IBCT engineer companies are authorized 75 or 76 personnel (HBCT has closer to 150 personnel) and both have a limited capability for terrain analysis, protective construction, breaching, and route reconnaissance. They are equipped with a mixed set of trucks and equipment. The Sapper Company in the IBCT is authorized 15 trucks and 6 heavy equipment items.²⁷ The company in the HBCT is authorized 15 trucks, 11 heavy equipment items, and 9 Bradley vehicles.²⁸ The engineer company of the SBCT is authorized 131 personnel, 12 Stryker engineer vehicles, 4 bridges with trailers, 23 heavy equipment items, and numerous trucks. These companies are supported during operations by engineer units from higher echelons.

3. Brigade Support Battalions

Modular brigade designers centralized provision of combat service support to the IBCTs and HBCTs by assigning all logistical resources to the brigade support battalions (BSB). The BSB provides supply, distribution, maintenance, medical, and food service support to the other battalions of the BCT. Table 4 shows the number of military personnel authorized for each of the three types of BSBs. There are two general kinds of support companies. Four forward support companies are designed to provide limited

²⁶ SRC 77405GFC21.

²⁷ SRC 05453G000.

²⁸ SRC 05307G000.

supply and maintenance support to the two maneuver battalions, the RSTA battalion, and the fires battalion. Three other companies provide distribution, maintenance, and medical support to the other BCT units and backup support to the forward support companies.

Table 4. Personnel Strength of Brigade Support Battalion Elements

Element	IBCT	HBCT	SBCT
Support Battalion Hqs	80	92	158
Forward Support Company—Maneuver Battalion	127	234	*
Forward Support Company – Maneuver Battalion	127	234	*
Forward Support Company—RSTA Battalion	96	146	*
Forward Support Company—Fires Battalion	90	137	*
Distribution Company	189	179	135
Field Maintenance Company	91	100	255
Medical Company	67	76	70
Support Battalion Total	867	1,198	618

*Each battalion in an SBCT has an organic support capability in the headquarters company.

The composition and strength of the forward support companies are roughly equivalent to the support capabilities that were organic to the same types of battalions under the AoE division. The Modular forward support company designed to support an infantry battalion is authorized 127 personnel, including a company headquarters of 3, a food service section of 22, a distribution platoon of 29, a transportation section of 24, and a maintenance section of 49.²⁹ A forward support company that provides CSS support for a combined arms battalion of an HBCT is authorized 234 personnel organized into a company headquarters of 7, a field feeding section of 23, a distribution platoon of 59, and a maintenance platoon of 145. Those companies provide “direct and habitual” support to designated battalions. If a battalion is detached from a BCT, its forward support company is designed to be attached to its supported battalion and deploy with that supported battalion.

4. The BCT as a Fixed Organization

Modular BCTs are fixed units in which subordinate elements are organic to that BCT. The intent of the designers was to have the BCT fight intact as a whole, and the design does not facilitate detaching units or accepting attached units. In this respect, the

²⁹ An infantry battalion under TOE 07015L000 (All battalions within OIF are organized under MTOEs that are modifications of such standard TOEs) contains 79 trucks of various capacities and \$97 million worth of other equipment that requires maintenance attention. This does not take into account any vehicles provided in-theater as augmentations. Source – FORCES model, Version 2007.1004, Army Cost Estimation and Analysis Center.

BCTs and most Combat Aviation Brigades (CAB) are different from the rest of the Modular Force, which is designed to facilitate assembling small units (detachments, platoons, companies) into battalions and brigades as appropriate for the mission and situation of an operation. While the emphasis of Modularity is on flexible organization for support units, the BCTs and the Combat Aviation Brigades are designed to be employed intact but can also be tailored if necessary. The rationale for that design is described below for the BCTs.

Their versatility and ability to make rapid mission transitions derives from their organic combined arms composition. Their balanced combined arms maneuver battalions need minimal re-configuration from mission to mission. Engineers are integral to modular battalions. Fire support parties are organic to the battalions. They make better use of non-organic lethal and suppressive fire support. Heavy brigade organizations are sufficiently robust to maintain full-time all around security for all organic and attached elements at all times. And there is sufficient organic support to fight and win assigned engagements, before external support is required. To enhance mission versatility, the design embodies modular combined arms components within every battalion of the brigade. The next higher headquarters can modify the mission capabilities of brigades, or “weight” them when designated the main effort, by attaching combat support mission modules to maneuver, reconnaissance, fires and brigade troops battalions. Because of similarities in the structure of overhead functions across the three types of brigades, and because battalions are also compact combined arms modules, the next higher command can also tailor brigades for specific missions by exchanging battalions.³⁰

The Army contends that there are five important features of the Army’s decision to designate battalions with a BCT as organic to that organization:

- Battalions are combined arms organizations that do not need reconfiguration from mission to mission.
- BCTs have sufficient internal support so that external support is not required.
- If a division or corps commander chooses to weight the effort, additional combat and combat support units can be attached to the BCTs.
- The “overhead functions,” including logistical support, are similar across the three types of BCTs.
- The next higher commander can exchange battalions between BCT types.

These assertions will be examined in more detail in Chapter 2, which describes Modular BCT operations in Iraq and Afghanistan.

³⁰ Modular Brigade Combat Teams: Task Force Modularity White Paper, Part III, 19.

E. Modular Support Brigades

The Army is organized for field operations in three echelons above the BCTs. The modular headquarters for these echelons are the ASCC Headquarters, Corps Headquarters, and Division Headquarters. All three headquarters are modular entities designed to use forces tailored for specified joint operations. All three are stand-alone headquarters to which a mix of subordinate organizations and units can be assigned. In addition to the BCTs, there are two kinds of subordinate brigades—modular and functional. Modular support brigades operate at the tactical level.

The next sections cover key aspects of functional support for the modular force in more detail and provide multifunctional capabilities to corps and division headquarters. The five kinds of modular brigades are Combat Aviation, Fires, Battlefield Surveillance, Maneuver Enhancement, and Sustainment. Each type may be attached to a division or corps (except for the sustainment brigade, which normally remains in general support or direct support of a division or corps). Corps commanders can also make these brigades available to other Service components of the joint force. Modular Support brigades have the organic expertise to command and control various unit types. The ASCC task organizes them by assigning or attaching battalions, companies, and detachments to the brigade headquarters. The organic signal and maintenance capabilities of a support brigade headquarters allow a higher headquarters to attach them to a headquarters of another Service or a joint headquarters.

1. Combat Aviation Brigades

The CABs were designed before the introduction of the Modular Concept and have not been realigned. Combat aviation brigades that were formerly organic to ROAD divisions are now separate brigades and have a fixed structure. The standard design for an aviation brigade has a headquarters and headquarters company, a signal company, an aviation support battalion, two attack helicopter battalions, one assault helicopter battalion, and one general support aviation battalion. The types of aircraft may vary, but the organizational structure is fixed.³¹ While other aviation or ground units may be attached to the aviation brigade, the extent to which organic aviation battalions or companies have been attached to other organizations, such as BCTs, is unclear.

2. Fires Brigades

The Field Artillery (FA) function was renamed as “fires” to recognize the significant role of missiles in providing stand-off fire support. A fires battalion of two batteries is included in the BCTs on the basis that fire support is an integral element of the combined arms team. Additional fire support is provided by the fires brigade that has

³¹. Smith, Colonel Rickey, “The Army Modular Force”

an organic base with a headquarters and headquarters battery, signal company, target acquisition company, attack UAV company, a brigade support battalion, and a missile (MLRS/HIMARS) battalion. Additional missile battalions and cannon battalions are attached to the fires brigades for operations as indicated by the planning process.

3. Battlefield Surveillance Brigades

The advent of modularity caused many changes in the intelligence organization at corps, division, and BCT levels. The division lost a military intelligence battalion, and MI companies were placed in the BCTs. To offset this move, the G2 section of the division headquarters was expanded to provide a greater analytical capability. The BfSB is intended to close the intelligence collection gap caused by the transformation of corps and division collection assets. The BfSB replaces the corps military intelligence brigade, the division military intelligence battalion, and many ground reconnaissance and scout assets. The BfSB provides intelligence, surveillance, and reconnaissance in support of a division, corps, or joint task force headquarters, allowing the senior commander to conduct non-contiguous operations. The BfSB conducts ISR operations to enable the corps or division commander to focus elements of combat power with precision and to execute current operations while preparing for future operations. According to doctrine, there should be one BfSB per committed division.³² Ten BfSBs are programmed in the force structure—four AC and six RC. The current Army force structure has 10 AC division headquarters and 8 RC division headquarters.

4. Maneuver Enhancement Brigades

One of the more innovative aspects of the realignment of combat support in the Modular Force is the creation of maneuver enhancement brigades (MEB) that are designed to provide engineer, military police, chemical, and air defense support in the theater of operations. The doctrinal mission of the MEB is to “enable and enhance full-dimensional protection and freedom of maneuver” for the BCTs and other theater organizations.³³ Each MEB has an organic base consisting of a headquarters and headquarters company, a signal company, and a brigade support battalion. Engineer, military police, chemical, and air defense battalions or companies are assigned to this base, and additional specialized units including combat battalions can be attached as appropriate. The BCTs have no organic air defense capability and this function is to be provided by a MEB and/or a theater air defense command. Military police and chemical units function under the MEB to provide general support for BCTs. There are also theater level commands for these functions that back up the MEBs. This arrangement may have

³² Operational and Organizational Concept for the Battlefield Surveillance Brigade, 1 May 2007.

³³ Smith, Colonel Rickey, “The Army Modular Force”

been prompted by the Maneuver Support Center at Fort Leonard Wood, home of the Engineer, Military Police, and Chemical Schools, which espoused an integrated approach for these three functions. The MEB has not worked out exactly as anticipated due to the lack of a mobile organized enemy force, but the existence of a brigade headquarters that can be assigned a variety of tasks has been useful overall.

5. Sustainment Brigades

The modular sustainment brigade is a multifunctional combat service support organization that combines supply, transportation, and maintenance functions that formerly resided in the division support command and corps support command. Its primary mission is to plan, coordinate, synchronize, monitor, and control combat service support units in a division or corps area of operations. Each of these brigades has an organic brigade special troops battalion with a headquarters and headquarters company, a signal company, a support company, and a medical company.

During operations in a theater, each sustainment brigade is tailored to support the units in an assigned area of responsibility. The operational elements of the sustainment brigade are combat sustainment support battalions that are multifunctional headquarters to which a tailored mix of subordinate companies and detachments can be assigned or attached. Sustainment brigades may also have companies and detachments directly subordinate to the brigade headquarters, including logistical task forces formed for specific missions. The brigade is task-organized with both functional and multifunctional subordinate units configured to distribute supplies and deliver services, including maintenance, to BCTs and other support brigades assigned or attached to a division or corps. The sustainment brigade reports to the corps support commander and is also the senior logistics command in a division AO. The sustainment brigade/Joint Logistics Command modular concept incorporates nontraditional organizations, such as water purification or petroleum pipeline companies, into the support structure. The sustainment brigade is capable (with augmentation) of managing logistics operations in support of joint or multinational operations and forces. With augmentation, it also can provide joint logistics command and control for a joint force commander.³⁴

Functional brigades operate at the operational level, generally under the ASCC, and depend on theater-level elements for signal and other support. The ASCC may attach functional brigades to corps or division headquarters. Types of functional brigades include engineer, military police, chemical, civil affairs, air and missile defense, signal, explosive ordnance disposal, medical, and intelligence. These functional brigades provide general support to the corps, divisions, and BCTs. There are some concerns about the

³⁴ "RCAAT Series 4th Sustainment Brigade, Iraq Lessons Learned, Leadership Program Development Presentation Transcript," December 2006, p. v.

ways in which this arrangement works in the theater. For example, a modular corps headquarters does not have an assigned signal brigade. Nor does it have a habitual relationship with any signal brigade. There was concern that this will reduce the corps headquarters' ability to function as a JTF because it is difficult to "plug and play" all the assets the corps headquarters relies on (engineer, civil affairs and psychological operations, etc.) without having a habitual relationship with a signal brigade to link these together.³⁵

F. Functional Support in the Modular Force

The modular force includes theater level commands for such functions as signal communications, civil affairs, engineer support, military intelligence support, military police, medical, personnel administration and finance, and logistics. Functional brigade headquarters carry out these functions with assigned or attached functional battalions, companies, and detachments. These functional units are often assigned on an area basis and are in general support of BCTs and Modular Support Brigades in their areas of responsibility. In other cases, they may provide general support on a unit basis. This section addresses two aspects of functional support: command and control and sustainment.

1. Tactical Command and Control

The designs of brigade, division, and corps headquarters in the Modular Force have improved the command and control function. The previous designs for these intermediate tactical headquarters authorized a command group and a staff, and a headquarters company or detachment that provided minimal housekeeping capabilities. For operations, these austere headquarters units had to be augmented by elements of other units to provide communications, security, electrical power, transportation, supply and other special capabilities. Modular headquarters are organized into command posts to support the way that they actually operate in the field. Even more important has been the formation of an organic special troops battalion for each headquarters that provides a lieutenant colonel and staff to command and control the several separate companies and detachments that support the headquarters. This design not only provides the headquarters a modicum of self-sufficiency and security but also provides a "home" for the customary attachment of additional specialized detachments.

2. Sustainment Support

In the Modular Force, administrative and logistical support is provided by a theater sustainment command directly to the BCTs and other brigades. Brigade support

³⁵ XVIII Airborne Corps/Multinational Corps-Iraq, IIR, May 2006, 6.

battalions in the BCTs are responsible for providing sustainment support to the organic BCT units. Administrative and logistics support for the BCTs and all other brigades or command headquarters operating in a theater is provided by sustainment brigades.³⁶ This is a very different concept from the previous doctrine, and it was initiated by the Combined Arms Support Center at Fort Lee, Virginia. Sustainment support had been for many years organized by branch—Quartermaster, Transportation, and Ordnance. During the 1980s, the Army had converted the direct support units in the division support command to be multifunctional and provide a package of supply, transportation, maintenance, and logistical management services. In 1990, the Army started Operation Desert Storm with corps and theater units organized by branch, but emerged with a mix of mostly multifunctional battalions with some single function battalions for special applications. The Army initiated training for multifunctional logistics officers and also designed smaller units (platoons, detachments, and teams) as the basic building blocks for task organizing combat service support units to provide supplies and services. This changed the way that the Army delivered sustainment support. As noted above, Modularity applied the same concept to the provision of combat support and created smaller engineer, signal, and military police units that could be mixed and matched when task organizing for missions.

The Modular Force has a theater-controlled sustainment system and a two-level sustainment system of which the BCT support battalion is the lower. Supplies and services are designed to flow directly from the theater sustainment command to the BCTs, without going through division and corps levels. In Iraq, the possible disadvantages of this two-level sustainment approach have been mitigated by the existence of fixed bases that have the capability to provide one-stop-shopping for tactical units without adequate organic or attached support units. Whether this logistical concept will work as well for major combat operations is untested at this point.

G. Observations

This section provides some general observations on the Modular Force as described above. There are several features of modularity that the Army might want to revisit given that the Modular Force has now been through six years of operational experience.

1. Effect of Fixed BCTs on Flexibility

The Army sought, through its modular reorganization and change from a division-based to a brigade-based structure, to accomplish the broad organizational goal of providing field commanders with the ability to make “rapid mission transitions” and

³⁶ Williams, COL Darrell K., LTC Lillard D. Evans, and CPT Brittany R. Warren, “Modular Transformation and the 3rd Sustainment Brigade,” *Army Logistician*, Jan-Feb 2009.

thereby to make the Army more versatile across the full spectrum of conflict. The Army's traditional management approach to organizational change has been to seek flexibility, "goodness of fit" between its organizational structures and the conditions of the external environment, and "open system" structures that eschew a "one size fits all situation." In the BCT case, "organic combined arms composition" was envisioned as being essential to the structure of the Army's combat forces and the three standard BCT configurations approved in 2004. The Army had, decades before, abandoned its regimental structure, which, similar to the modular brigade combat teams, featured permanent assignment of battalions to the regiments, because that structure was deemed too inflexible.

The next chapter presents some lessons learned from BCT deployments based on assessments by BCT and Division Commanders as well as analysis by IDA. IDA was able to take a snapshot of the task organization data of all BCTs and glean what the theater was doing with the BCTs once in the U.S. Central Command (CENTCOM) theaters of OIF and OEF. Most BCTs were task-organized to a different number of maneuver battalions on arrival in theater. The Army is now asserting that there is a need for a third maneuver battalion³⁷ but is not convinced that paying for that third battalion with fewer BCTs is worth the cost. Given that conundrum, it might behoove the Army to consider increasing the flexibility and versatility of the BCT by making moving battalions easier to accomplish. One of the changes that the Army may want to consider is whether it should abandon a fixed brigade (or regiment) and once again make the maneuver battalion and other battalions capable of flexible movement among brigades as the mission and situation necessitates. In the current counterinsurgency (COIN) environment, the Army is actually doing well in moving battalions on arrival in theater. The issues that are expected to be a little more troublesome would be those associated with moving light battalions to HBCTs and CABs to IBCTs in an MCO.

2. Provision of Combat Support

As part of the effort to provide organic combat support (CS) capabilities for the BCT that are to be integral components of the combined arms team, the BCT has several separate companies that provide signal, military intelligence, and engineer support as part of the brigade troops battalion (or in the case of engineer support, part of the combined arms battalions). Military police support is provided by a military police platoon in the brigade troops battalion. These combat support units are small and have equipment just sufficient to provide a modest level of support to the BCTs. The brief descriptions above of how combat support enablers are included in the BCT indicate that these small companies are well designed to function when the BCT operates as a fixed unit in a conventional operation. They also make it clear that augmentation might be needed when

³⁷ TRADOC Document (TBD)

a BCT operates with more than two maneuver battalions. There is insufficient capability to take on additional units or areas of responsibility without augmentation from higher echelons. The design of the BCT therefore may not be robust enough to accommodate the full range of task organization.

3. Provision of Combat Service Support

The modular concept for providing combat service support (CSS) has centralized all logistical capabilities under logistical commanders, rather than tactical commanders. CSS capabilities that previously were organic to combat battalions have been removed in the modular BCTs (to a lesser extent with the SBCT). The rationale for, and advantages of, depriving battalion commanders of most organic CSS assets is not clear. The design of the BCT hinges on internal command relationships, which were envisioned to be the key to “rapid mission transitions.” If maneuver battalions are to be detached from and reattached to BCTs as the tactical situation dictates, a return to pre-Modular support arrangements may be warranted. Rather than having a forward support company attached, it may make more sense to provide battalions the support capabilities they use routinely and frequently during operations. The development of the SCBTs was started before Modularity, and it was a conscious decision to let that organization continue as originally organized.

4. The Future of the Modular Force

There are some obvious positive conclusions. The general design of Modular brigades with an organic core that can receive attachments and accommodate direct support units is good. Provision of brigade support battalions and consolidation of several varied separate companies into special troops battalions has also been good, as has emphasis on task organizing detachments and companies into multifunctional battalions and brigades. Extending to the combat support functions the devolution of fixed battalions into flexible battalions, as was done earlier for the combat service support and personnel service support functions, has been well received.

Paradoxically, while increasing the granularity and flexibility of the support functions, Modularity has also introduced new fixed brigades—like the previous regiments—for combined arms operations and aviation operations. There are some concerns over the ease with which these fixed organizations can add or swap battalions especially of differing types.

The Modular Force has been modified in some ways since its introduction, based largely on experience gained from six years of combat operations in Iraq and Afghanistan. The next chapter addresses how the Modular Force fared during these combat operations.

2. Modular Force Operations in OIF and OEF: 2006-2007

A. Introduction

This chapter describes some aspects of how Army BCTs and other Modular Force elements operated in Iraq and Afghanistan from 2006 to 2007. This is a partial description that covers the way units were task-organized in the combat theaters, how they provided additional “boots on the ground” to conduct counterinsurgency operations, and how they reacted to the introduction of the Modular Force. There are three major thrusts to this chapter: reacting to the needs of counterinsurgency campaigns; task organization; and reaction to the arrival in 2006 of Modular Force BCTs and other modular elements. The chapter is organized into four sections: BCT operations as reported by field commanders in their lessons learned reports; task organization of maneuver battalions in BCTs at the end of 2007; commentary on operations at echelons above BCTs and overall observations on how the Modular Force performed in Iraq and Afghanistan.

The first two modular BCTs deployed to Iraq in December 2005. By 31 December 2007, all but two of the brigades in Iraq and Afghanistan were modular BCTs or SBCTs.

B. BCT Operations: Field Commanders’ Lessons Learned

This section presents some of the comments that Army division and brigade commanders made about their experiences with the Modular Force in OIF and OEF in Afghanistan in 2006 and 2007. There was some dissatisfaction with the IBCTs and HBCTs in both campaigns. To illustrate, two division and two brigade commanders stated that, “The modular BCT is not as capable as its “Army of Excellence” or “Force XXI” predecessors and does not project the combat power required by commanders today.”³⁸

The sources for the comments in this section are lessons learned reports from the Center for Army Lessons Learned (CALL), which is part of the Combined Arms Center, located at Fort Leavenworth, KS. CALL collects and analyzes data from a variety of current and historical sources, including Army operations and training events, and

³⁸ 25th Infantry Division and 1st Cavalry Division (CAV), Initial Impressions Report (IIR), September 2007.

produces lessons learned reports for military commanders, staffs, and students. The data presented in this chapter are derived from CALL Initial Impressions Reports, After Action Reports, and Combined Arms Support Command (CASCOM) seminars. Reports were obtained from two corps, eight divisions, and 19 BCTs. The organizations whose reports were used are shown in Table 5.

Table 5. Lessons Learned Reports Consulted in the Study

Unit	Deployment Dates	Number of Organic BCTs Reporting
Corps Headquarters		
XVII Airborne Corps	OIF 2005-2006	
V Corps	OIF 2006-2007	
Division Headquarters (Covered attached Brigades/BCTs)		
1 st Cavalry Division	OIF 2006-2007	4 BCTs
3 rd Infantry Division	OIF 2005-2006	4 BCTs
4 th Infantry Division	OIF 2007-2005	4 BCTs
10 th Mountain Division	OEF 2006-2007	
25 th Infantry Division	OIF 2006-2007	4 BCTs
42 nd Infantry Division	OIF 2005-2007	National Guard
82 nd Airborne Division	OEF 2002-2003 OEF 2007-2008	
101 st Airmobile Division	OIF 2005-2006	
Brigade Combat Teams and Brigades		
1 st Brigade, 1 st Armored Division	OIF 2006-2007	
1 st Brigade, 82 nd Airborne Division	OEF 2002-2003	
2 nd BCT, 1 st Infantry Division	2008	
3 rd Brigade, 10 th Mountain Division	OEF 2006-2007	
3 rd Armored Cavalry Regiment	OIF 2005-2006	Pre-Modular

1. “Boots on the Ground”

Counterinsurgency operations in Iraq and Afghanistan from 2005 to 2007 required optimizing the numbers of “boots on the ground” to patrol the cities and villages, secure the bases and the population, and seek out the insurgents. This had been a problem for the pre-modular units that required them to reorganize and form non-standard organizations to control the terrain and the lines of communications. The problem was exacerbated by the arrival of the modular BCTs that had fewer infantry troops than the pre-modular units. A pre-modular brigade task force with three infantry battalions had 12 infantry companies; the modular IBCB has eight infantry companies including the weapons companies. A pre-modular heavy brigade with two mechanized battalions had six

mechanized infantry companies; the modular HBCT has four mechanized infantry companies.

Five division commanding generals stated that the modular BCTs did not have enough maneuver units to conduct required combat operations properly.³⁹ This observation was not limited to BCT capabilities in counterinsurgency operations. It also applied to the ability of modular BCTs to conduct major combat operations and react to or exploit changes in the situation.

Because of this, IBCT and HBCT commanders often chose to use their armor, artillery, and other combat support (CS) and combat service support (CSS) soldiers to perform infantry tasks. (The SBCTs have a third combat maneuver battalion in addition to the combat enablers, and the commanders of these brigades did not have to reorganize their BCTs significantly when deployed to conduct counterinsurgency operations.)

In Afghanistan, IBCTs were assigned large areas of responsibility, and all soldiers, regardless of military occupation specialty or unit, learned and practiced the combat skills needed to function as infantry soldiers. Many of the support soldiers fought as infantrymen. For example, the 4th IBCT of the 10th Mountain Division was reconfigured for operations in Afghanistan. Due to the large geographical Area of Operation (500 km wide and 250 km deep), the commander assigned each of the battalions, including the BSB, an area of operations. All support soldiers were provided extra weapons and received small unit training in infantry tasks. The BSB was used as a maneuver headquarters partly because of the brigade's large area of operation. Even after reconfiguration, the brigade did not have enough infantry soldiers to operate brigade, battalion, and company-level forward operating bases (FOB) and conduct offensive operations and daily patrols, and perform stability operations.⁴⁰

2. Number of Maneuver Battalions in the BCTs

Some commanders found that a two-battalion BCT was inadequate for operations in these theaters. Colonel B. Don Farris, Commander, 2nd BCT, 325th Airborne Infantry Regiment reorganized his BCT in the following manner.

In Iraq we had a two battalion Task Force with a very small RSTA Battalion and we needed to create three equal battalions so we cross-attached within the BCT. Two rifle companies per, one CAV troop per,

³⁹. Based on Center for Army Lessons Learned (CALL) reports of the 1st Cavalry, 3rd Infantry, 4th Infantry, 10th Mountain, and 25 Infantry divisions.

⁴⁰. 3rd Brigade Combat Team 10th Mountain Division, Operation Enduring Freedom (OEF), IIR, September 2007.

and we busted up the weapons companies. We created three equal Task Forces. We gave each their own enablers; MPs, Engineers, etc.⁴¹

According to many field commanders, this and similar measures did not offset the absence of a third maneuver battalion.⁴² In addition, the diversion of the RSTA Squadron from its intended role limited the ability of commanders to be able to see first, and understand first, so they could act first, and finish decisively. The ability to act first was degraded not only by the reduced ability to see and understand first, but also due to the lack of infantry or mechanized companies that a third maneuver battalion would have provided.

Colonel Jon Lehr, Commander, 4th Stryker BCT, 2nd Cavalry Regiment expressed his idea of the value of his SBCT's third maneuver battalion during a commanders' program interview with CALL. He said:

With regards to preparedness for a high energy conventional fight, units in Iraq have often fought in the full spectrum of operations. When we took our battle space, our forces were engaged in kinetic operations every day. With some reorganizing of personnel and equipment, we were ready to fight the full fight. Some other BCTs might not be in the position to see it this way.⁴³

3. Nonstandard Mission Employment of BCT Units

HBCT and IBCT Commanders deployed to OIF and OEF sought to increase the number of maneuver elements at their disposal by assigning non-standard missions to BCT units, establishing a provisional third maneuver battalion, creating provisional infantry or security units with personnel from CS and CSS elements, moving BCT elements from one battalion to another after clearing operations ended by reducing the holding force designated to prevent re-entry of insurgents into areas just cleared, and assigning tactical tasks to the BSTB.

Nonstandard employment of CS and CSS units included assigning battle space to brigade fires battalions and reconnaissance battalions and having them operate as maneuver units. These re-missioned battalions conducted a variety of complex missions including training of Iraqi police forces, route clearance, convoy escort, FOB security, raids, cordon and search, traffic control points, managing an insect eradication program,

⁴¹. CALL interview with Colonel B. Don Farris, 2nd BCT, 82nd Airborne Division, 325th Airborne Infantry Regiment, 6 May 2008.

⁴². Donnelly, William M, *Transforming an Army at War: Designing the Modular Force, 1991-2005* (Washington, D.C.: Center of Military History, U.S. Army, 2007). This book chronicles the events and decisions leading up to current BCT structure of two maneuver battalions instead of three maneuver battalions as originally envisioned.

⁴³. ALL interview with Colonel Jon Lehr, Commander, 4/2 SBCT, 22 March 2008.

civil affairs patrols, and acting as a guard force for U.S. Embassy personnel and facilities. Some nonstandard individual assignments included personal security details, Iraqi security force maneuver training, mediation between Iraqis, and project management. Assignment of nonstandard missions to artillery soldiers was of particular concern to the unit leadership. While these field-artillery-trained personnel were employed in nonstandard roles, only a few soldiers were conducting field-artillery-related missions, and they did so only a portion of the time. The use of these artillery soldiers as infantry, coupled with short dwell times at home station, caused unit leaders to complain that core competencies were being degraded to the point that units could not perform integrated fires and maneuver operations required in high intensity warfare.

Starting in 2003, radical transformations took place in Iraq that included significant changes in fundamental missions and capabilities that occurred at the brigade and battalion level. The most dramatic of these transformations was the conversion of FA and armor battalions to provisional infantry battalions that conducted full spectrum operations instead of the primary combat missions for which their soldiers had trained, parking many of their organic combat vehicles, and conducting patrols and other operations on foot or in wheeled vehicles such as HMMWVs. Moreover, a new mission set also required different training and a new task organization. This practice continued after the arrival of the Modular BCTs.

Fires Battalions. FA battalions were often used as infantry. As there were fewer calls for artillery support in stability operations, the artillery was thus underutilized. Using FA soldiers as additional infantry was a natural way to increase the “boots on the ground.”

The 4th Battalion, 27th Field Artillery, a unit in the 1st Armored Division (1st AD), was converted into a provisional maneuver battalion in Baghdad in pre-modular May 2003. Prior to deployment, the battalion was told that they would be conducting full-spectrum operations in the Iraqi capital. After arriving in theater, the battalion commander reorganized his staff and began training his artillerymen in basic infantry tasks such as movement techniques, clearing buildings, and cordon and searches.⁴⁴

Other artillery units that deployed to Iraq in 2004 experienced similar transformations but had time to prepare and train their soldiers for the new missions. Before its deployment to Iraq in 2004, the (1st CAV) Cavalry Division converted its legacy division artillery organization into a provisional combined arms organization called the 5th BCT, 1st Cavalry Division. This provisional maneuver brigade was built around the core of two converted FA battalions and one converted air defense artillery battalion. The new brigade also had one light infantry battalion and one, or sometimes

⁴⁴. Extract from USA Combined Arms Center (CAC) publication “On Point II Transition to the New Campaign: The United States Army in Operation IRAQI FREEDOM May 2003-January 2005,” 127.

two, cavalry squadrons. While they enjoyed some preparation time, brigade leaders had less than a year to retrain their staffs and soldiers for missions that were very different from their traditional role as providers of indirect fire support to the division.⁴⁵

Concern was expressed by BCT and artillery commanders about the degradation of core competencies by many of the artillery, scouts, and other soldiers performing nonstandard missions as a result of being deployed to OIF or OEF. These soldiers spent a year or more working in mission areas foreign to their primary skills. Employing them in nonstandard missions, coupled with short dwell times, was thought to degrade the core competencies of these soldiers. This raised concerns about the Army's ability over the long term to conduct integrated combined arms operations in future MCOs. However, conversion of artillery units to provisional infantry units in Iraq in particular was a useful way to accomplish the immediate missions and demonstrate adaptability and flexibility.

Reconnaissance, Surveillance, and Target Acquisition (RSTA) Battalions. Some reconnaissance squadrons deployed to OIF were employed as a third maneuver battalion within the BCTs. They were assigned areas of operations (AO) and expected to conduct the same mission/task sets as a maneuver battalion. While not designed to perform such missions, the reconnaissance squadrons adapted their tactics, techniques, and procedures to operate as an infantry battalion. Unit leadership was less concerned about maintaining core competency proficiency in reconnaissance task sets despite the use of reconnaissance units in nonstandard missions. Figure 10 and Figure 11 show two ways that BCT commanders used their RSTA battalions as maneuver elements.⁴⁶ Figure 10 shows one example of how an HBCT was reconfigured in Iraq. In this example, the commander created a third maneuver battalion by attaching two batteries from the fires battalion and the MP Company from the BSTB to the RSTA squadron battalion.⁴⁷

^{45.} Ibid.

^{46.} 25th Infantry Division and 1st CAV, IIR, September 2007, 10.

^{47.} Ibid., 11.

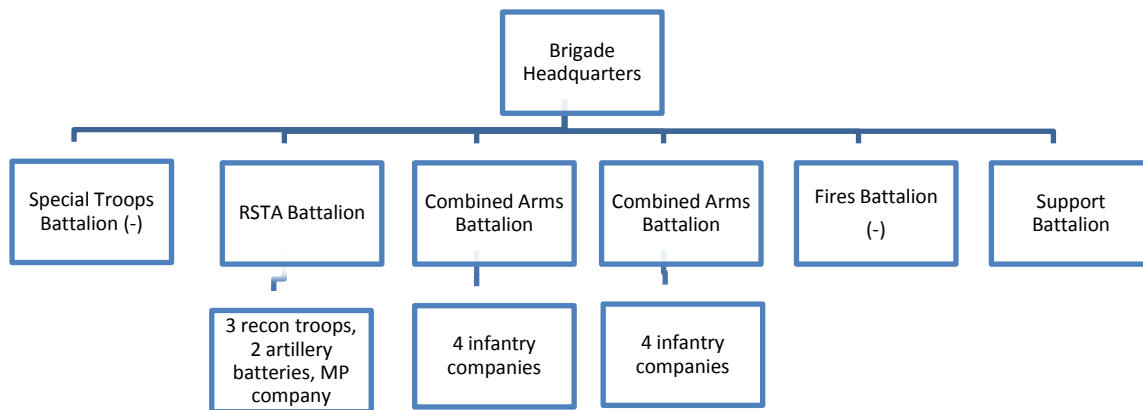


Figure 10. Reconfigured HBCT Deployed in Iraq

Figure 11 shows how an IBCT was reconfigured when deployed in Afghanistan. In this case, the RSTA battalion was augmented by an artillery battery and the Engineer company and used as a third maneuver battalion. The BSTB was also used to plus up the RSTA battalion when needed or was assigned tactical missions as necessary.

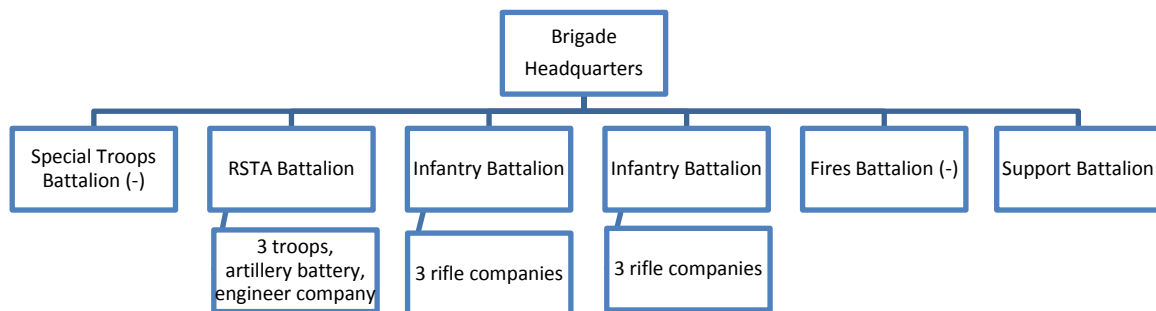


Figure 11. Reconfigured IBCT Deployed in Iraq

Brigade Special Troops Battalions (BSTB). One of the features of the modular BCTs was the BSTB, which consists of the Brigade Headquarters and Headquarters Company, a signal detachment, a Military Intelligence (MI) Company, a Military Police, (MP) platoon, and an engineer company. In some instances, these BSTBs were used as a small maneuver battalion.

The 5th BCT of the 1st CAV deployed their BSTB in the modular BCT configuration. The BSTB often received MP, Civil Affairs, and Tactical Human Intelligence Team attachments once in theater. However, in this case, because of the large AO to be covered, the BSTB served much of the time as a maneuver element responsible

for an assigned AO. Based on this experience, CALL found that the non-doctrinal use of the BSTB as a maneuver element required reconsideration of doctrine for modular brigades, and that the BSTB demonstrated a marginally effective ability to perform command and control as a maneuver element. CALL also pointed out that the BSTB lacked key staff capabilities to provide flexibility for the commander and reduce risk. In fact, modular BCT commanders and brigade staff officers have stated during CALL interviews that, for operations like these in Iraq and Afghanistan, they do not support having a BSTB at the expense of not having a third maneuver battalion.⁴⁸

The SBCTs do not have a BSTB. Before deploying to theater, one SBCT commander created a provisional BSTB that included the Brigade Headquarters and Headquarters Company, MI company, signal company, anti-tank company, and engineer company. Stryker units did not have to eliminate their third maneuver battalion to generate the BSTB. When the SBCT community was given the choice of gaining an STB headquarters and headquarters company and other Modular Force capabilities at the cost of the third maneuver battalion, SBCT commanders opposed trading their organic combat power for apparently less important assets.⁴⁹

In 2007, the commander of the 3rd Armored Cavalry Regiment (ACR) was offered a BSTB headquarters without having to trade it for combat power. The commander of the regiment requested instead that the force structure earmarked to establish a BSTB headquarters be used to create additional scout positions in the regiment.⁵⁰

4. BCT Military Intelligence Capabilities

There were concerns about the capabilities of BCT intelligence assets to operate in a complex COIN environment. These concerned deficiencies in organic UAV coverage, imagery processing capability, signal intelligence collection capability, HUMINT analysis, HUMINT collection, counter intelligence (CI), and interrogation personnel for a brigade holding facility. These shortfalls in BCT capabilities would require a higher headquarters to reapportion assets from other missions. Army units reported that the nature of the operating environment in Iraq made it necessary to adjust the relationship between intelligence and operations. In many operations, soldiers conducted raids, cordons and searches, and other types of operations in order to collect intelligence. This shift in the focus of operations resulted from a number of factors, the most important of

⁴⁸. 25th Infantry Division and 1st CAV, IIR, September 2007, 15.

⁴⁹. Ibid., 14.

⁵⁰. 3rd Armored Cavalry Regiment, OIF Post Deployment After Action Report Process, IIR, March 2006.

which was the Army's effort to adapt and augment its traditional intelligence assets and methods so that tactical units could act in a decisive way.⁵¹

5. Engineer Support in BCTs

Brigade commanders reported that the modular BCTs lacked adequate engineer capability. Three said that modular HBCTs required more combat engineers than they were authorized or had received as attachments. Two of the HBCTs deployed to OIF organized their BSTBs to perform engineer missions. A third HBCT did not have the engineer expertise to create a similar capability in its BSTB, so it employed key components of its BSTB headquarters to perform intelligence fusion and knowledge management functions.⁵² Another modular BCT commander, with what he reported as too few combat engineers, decided to focus his engineer troops exclusively on route clearance. Once in theater, the commander reconfigured his combat engineer company to provide route clearance as well as perform its secondary role as an infantry maneuver element. The commander reported that:

The Ready First Combat Team deployed as an Army of Excellence BCT, which provided greater organic engineer capabilities, yet the resources were insufficient in the COIN environment of Iraq. Modular force organic engineer assets within BCTs are greatly reduced from the legacy force.⁵³

When asked about the modular brigade concept after his return from a deployment to OIF, Colonel Peter DeLuca, Commander, 20th Engineer Brigade explained that:

The only drawback is the BCTs need a third maneuver battalion and they need an Engineer Battalion. They need that Staff. They are authorized a Major to be the BCT Engineer, but this is generally not filled because there are two branch qualifying Major positions in the Cavalry Squadron. Engineers across the Army fill the XO and S3 positions of Cavalry Squadrons. They are qualified and they do very well since they are combined arms thinkers, but that leads to a pre-Command course Captain as the BCT Engineer. The BCTs are feeling that pain. If you had an Engineer Battalion, you would have a Battalion CDR and Staff to be the BCT Engineer Staff and, for the Infantry BCTs', provide more than the current one-undersized Engineer Company without the right equipment.⁵⁴

Engineer units were also in demand for general construction tasks, providing force protection, collecting and destroying enemy ordnance, and working with Civil Affairs

⁵¹ Extract from USA Combined Arms Center publication "On Point II Transition to the New Campaign: The United States Army in Operation IRAQI FREEDOM May 2003–January 2005," 191.

⁵² 25th Infantry Division & 1st CAV Observations from Modular Force Divisions in OIF, IIR, September 2007.

⁵³ 1st Brigade, 1st Armored Division Ready First Combat Team, OIF, IIR, April 2007, 36.

⁵⁴ DeLuca, COL Peter "Duke", Commander, 20th Engineer Brigade interviewed by CALL, 11 April 2008.

units on reconstruction projects.⁵⁵ When the U.S. Army V Corps entered Iraq in March 2003, it had about 4,000 engineer soldiers, most of whom supported combat operations at the tactical level.⁵⁶ By June 2003, the engineer force in Iraq had grown by 19,000 soldiers, one-third in the BCTs and two-thirds in the echelons above brigade. The 4th Infantry Division deployed to Iraq with an engineer company for each of the maneuver battalions in its subordinate BCTs, instead of the standard allocation of one engineer company per IBCT.⁵⁷

Lessons learned indicate that the Modular Force does not provide enough combat engineers to enable the BCTs to accomplish their missions effectively. Organic combat engineer assets are insufficient to meet the needs of the BCT, and there are insufficient non-organic combat engineers in the force structure to make up for that shortfall.

6. Sustainment Support in BCTs

The brigade support battalions appear adequate to sustain the operations of the BCT, but they may be inadequate to support additional units that may be attached to the BCT. The general support companies of the brigade support battalions must not only support the organic BCT units but also provide direct support to the various types and numbers of units that could be attached to BCTs.⁵⁸ Those companies are smaller in size than their GS counterparts in the AoE division, but they are expected to perform the same functions for the BCTs.

The field maintenance company of an IBCT has a limited recovery capability designed to support the types of vehicles found within that lightly equipped brigade. When a combined arms battalion or a heavy RSTA battalion is attached to an IBCT, the capabilities of the IBCT organic support battalion may not be able to accommodate these needs without augmentation from theater logistical units.⁵⁹ The problem is in the organization and equipment of the general support company as noted below.

The inadequacy of the support battalions for flexible task organization is exemplified by the difficulties that occur when a combined arms battalion is attached to

⁵⁵. Flowers, Robert B., "Army Engineers: Supporting the Warfighters and Reconstruction Efforts," Army, October 2004, Volume 54, Issue 10, 185.

⁵⁶. Martin, COL Gregg F., "Victory Sappers," V Corp/GJTF-7 Engineers in Operation Iraqi Freedom, Engineer, Oct-Dec 2003, 4-5.

⁵⁷. 4th Infantry Division, Observations from a Modular Force Division in OIF, IIR, February 2007.

⁵⁸. The MTOE of the 704th Support Battalion of the 4th BCT, 1st Infantry Division contains the following narrative for those companies that have BCT-wide responsibilities: provides command and control for all organic and attached units of the Brigade Support Battalion (BSB).

⁵⁹. The term GS is used comparatively to the type of support provided by the Main Support Battalion of a Divisional Support Command in the AoE structure. Depending on the support concept being followed the GS term may now be obsolete.

an IBCT. The distribution company of an IBCT is authorized 11 each M978, 2,500 gallon fuel tankers and 35 M1120A2 10-ton HEMMTs. The IBCT Field Maintenance Company is equipped with 2 M984A1 HEMMT wreckers and 2 M1089A1 MTV 5-ton wreckers. The combined arms battalion would have 60 wheeled vehicles and 130 tracked vehicles, including tanks and fighting vehicles not found in the IBCT. The workload for ammunition and fuel is much greater for the combined arms battalion. If the combined arms battalion comes with its own forward support company, there would be an additional 60 vehicles, including 12 each M978 2,500-gallon fuel tankers, 16.5-ton palletized loading system vehicles, three wreckers, and two tank retriever vehicles to support the combined arms maneuver battalion. However, the support battalion of the IBCT cannot support this additional workload in either amount or kind. The Forward Support Company from an HBCCT comes equipped with 2 HEMMT, 1 MTV 5-ton truck wrecker, and 4 M88A2 tank retrievers. There is no heavy backup evacuation capability in the IBCT Field Maintenance Company.⁶⁰ The point is that the BCT support battalions are designed to support the organic units of the BCT and often cannot support attached units, particularly those with tracked vehicles, without augmentation from higher echelons. Attachment of Stryker battalions to an IBCT, and CABs to SBCTs, causes similar problems to a lesser degree. This problem with supply and maintenance support is a major challenge to flexible employment of the modular BCTs.

These support problems have been managed by improvisation in the established stability operations counted in the CENTCOM theater of Iraq, but they should be examined, because in other theaters or in major conventional operations they could suggest serious weaknesses in the modular design that could be corrected prior to employment.

7. Irregular Warfare (IW) Enablers for BCTs

Some BCT commanders were concerned about the availability of IW enablers to conduct COIN operations. They wanted more intelligence, surveillance, and reconnaissance, engineer, psychological operations (PSYOP), and Civil Affairs (CA) capabilities for their BCTs. They wanted a more robust brigade staff section with Civil-Military Operations (CMO) skills. One BCT commander noted:

Within the stability operations mission (in particular civil military operations and reconstruction/development), it is imperative to operationalize the non-lethal fight or it would not complement the ground gained during the kinetic fight. It is acknowledged that the CMO fight is challenging and infinitely more complex than the kinetic fight. It is also acknowledged that while you can't win the fight with CMO you could

⁶⁰. The specific equipment authorizations mentioned were obtained from Version 2007.1004 of the FORCES database of the U.S. Army Cost and Economic Analysis Center.

easily lose the fight if it is not utilized properly. With the size of the CMO mission, it is clear that the BCT resident Civil Affairs (CA) staff of one Major and Information Operations (IO) staff of one Major and one SSG is inadequate. This shortfall is mitigated by CA and Psychological Operations (PSYOP) plug-ins when the BCT is established in theater, but that does not help with the train up or initial planning.⁶¹

Another BCT commander said the following:

We need more ISR and Signal Intelligence (SIGINT) capability. Our manhunt/lethal network operations must be the focus of the limited capabilities we do have. Intel personnel shortages at the tactical level further hamper this effort. From a Brigade Commander's perspective, there are way too many analysts concentrated at levels above brigade. I need this analytical ability down at my level facilitating the brigade fight.⁶²

Some BCT commanders reorganized their staffs to accommodate the need to operate in an IW environment. They created additional CA, PSYOP, and IO staff officers and Noncommissioned Officer (NCO) positions as needed to accomplish their missions. Personnel for these positions were taken out of hide, using assets from elsewhere in the BCT. This left the BCT short in other areas, as well as in suitably trained personnel.

8. Summary of Sources

The Army lessons learned reports upon which this section is based and the topics upon which they commented are shown in Table 6. These reports are a small sample of the lessons learned from eight years of operations in Iraq and Afghanistan.

Table 6. Tabulation of Unit Comments

	# of Reports	Combat Maneuver Battalions	Engineer Support	Reconfiguring for Non- Standard Missions	Modular Support Brigades	Combat Service Support
Corps Hqs	2		1		2	2
Divisions Hqs	8	5	4	6	3	4
BCTs	5	4	3	6		2
Sustainment Bdes						3
Totals	15	9	8	12	5	11

⁶¹. Ferrell, COL Terry, Commander, 2nd HBCT, 3ID, Iraq, 8 May 2008, excerpt from Commander Interviews Volume I, CALL.

⁶². Farris, COL Don, 2-82 ABN, Multinational Division Baghdad, 21 April 2008, excerpt from Commander Interviews Volume I, CALL.

C. One-Day Snapshot of BCT Organization

This section describes the task organization and employment of modular BCTs in OIF on 31 December 2007. This in-country perspective provides insights on:

- How Modularity affected the ability of the Army to task organize for combat missions.
- How the data could suggest whether further force structure changes are indicated to enhance force stability and ease organizational constraints caused by repetitive, long-term deployments to conduct counterinsurgency operations

This was done to determine if force structure changes could enhance flexibility and ease task organization for combat operations. The date of 31 December 2007 was selected for the “snapshot” based on the assumption that deployments would be minimized over the end-of-year holiday period.

There are two principal sources for the information in this section. JOPES data were used to determine what Army units by UIC and sub-units by derivative UIC were in country on the snapshot date. Annex A, Task Organization, to the Multi-National Corps Operations Order was also consulted. While these two sources are classified, the material in this chapter is unclassified.

1. Task Organization of Maneuver Battalions in Iraq

This section addresses the extent to which the BCTs were task-organized for operations in Iraq on 31 December 2007. On that date, the Army divisions, BCTs, and maneuver battalions in the theater were organized as shown in Table 7.

Multi-National Corps-Iraq (MNC-I) (III Corps Headquarters) commanded three U.S. division headquarters. The 4th Infantry Division was designated as the Multi-National Division-Baghdad, with seven BCTs. The 3rd Infantry Division was designated as Multi-National Division-Central, with four BCTs. The 1st Armored Division was designated as Multi-National Division-North, with 4 BCTs. Two BCTs were retained under the Multi-National Corps, and one BCT was attached to the Marine Corps, which commanded Multi-National Force-West. There were 40 maneuver battalions in these 18 BCTs plus 3 separate maneuver battalions and 2 Marine battalions, for a total of 45.

Table 7. Organization of BCTs and Maneuver Battalions on 31 December 2007

	Maneuver Battalions On Hand				Comments
Multi-National Corps Iraq (MNC-I)	Organic	Attached	Detached	Available	
1 st IBCT, 82 nd Abn Div	2	+2	-	4	2 ARNG Bns
116 th IBCT, VA ARNG	2	+1	-	3	1 AC Bn
Separate Battalions	3			3	ARNG Bns
4 th Infantry Division					
3 rd HBCT, 4 th Inf Div	2			2	
1 st HBCT, 1 st Cav Div	2			2	
2 nd SBCT, 25 th Inf Div	3			3	Pre-Modular
2 nd Stryker Brigade	3		-3	0	
4 th IBCT, 10 th Mtn Div	2	+3	-2	3	
2 nd IBCT, 82 nd Abn Div	2	+1	-	3	
2 nd BCT, 101 st AA Div	2	+2	-1	3	
3 rd Infantry Division					
2 nd HBCT, 3 rd Inf Div	2		-1	1	
3 rd HBCT, 3 rd Inf Div	2		-1	1	
4 th HBCT, 3 rd Inf Div	2	+1	-1	2	
3 rd I BCT, 101 st AA Div	2			2	
1 st Armored Division					
3 rd Armored Cav Regt	3		-1	2	Pre-Modular
4 th SBCT, 2 nd Inf Div	3		-2	1	
1 st IBCT, 10 th Mtn Div	2			2	
1 st IBCT, 101 st AA Div	2			2	
Multi-National Force West					
1 st HBCT, 3 rd Inf Div	2	+2		4	+2 USMC Battalions
TOTAL	43	+12	-12	45	

On 31 December 2007, 12 of the 18 Army BCTs under MNF-I (66.7%) had either lost at least one maneuver battalion to another BCT or had received at least one maneuver battalion from another BCT, or both. After the task organization, the number of maneuver battalions available to the BCTs varied considerably: 1 BCT had no maneuver battalions; 3 BCTs had one maneuver battalion; 7 BCTs had two maneuver battalions; 5 BCTs had 3 maneuver battalions, and 2 BCTs had four maneuver battalions.

2. Task Organization of Reconnaissance, Surveillance, and Target Acquisition (RSTA) Battalions in Iraq

Although most RSTA battalions remained with their parent BCTs, there was also some movement of RSTA battalions between BCTs. On this date, there were 20 RSTA or reconnaissance battalions in the theater, 18 organic to the BCTs and 2 separate units. Three of the BCT RSTA battalions were moved from their parent BCTs to other BCTs, as shown in Table 8.

Table 8. Task Organization of RSTA Battalion

	RSTA Battalions On-Hand			
	Organic	Attached	Detached	Available
4th Infantry Division				
2 nd SBCT			1	0
2 nd IBCT, 82 nd Abn Div	1	1		2
2 nd IBCT, 101 st AA Div	1	1		2
3rd Infantry Division				
2 nd HBCT, 3 rd Inf Div			1	0
1st Armored Division				
4 th SBCT, 2 nd Inf Div		1		1
1 st IBCT, 101 st AA Div			1	1
Total	2	3	3	6

When the 42 maneuver battalions and 18 RSTA battalions in the BCTs are combined, the distribution of units per BCT is as shown in Table 9. There is one BCT with no maneuver or RSTA battalions, one with 1 maneuver or RSTA battalion, three with 2 battalions, five with 3 battalions, three with 4 battalions, and five with 5 battalions.

Table 9. Distribution of Maneuver Battalions and RSTA Battalions per BCT

Maneuver Bns and RSTAs	0	1	2	3	4	5	BCTs
III Corps					1	1	2
4 th Infantry Division	1			2	2	2	7
3 rd Infantry Division		1	1	2			4
1 st Armored Division			2	1		1	4
MNF-West (USMC)						1	1
Total	1	1	3	5	3	5	18

In summary, of 18 Army BCTs, 13 (72%) had either lost at least one maneuver or RSTA battalion to another BCT, or had gained at least one maneuver or RSTA battalion

by attachment, or both. It appears that in many cases, the RSTA battalions were treated as if they were maneuver battalions. This one-day snapshot indicates that there was extensive movement of maneuver battalions and RSTA battalions as field commanders adjusted task organizations to fit their situations.

D. Operations at Echelons above BCTs

There were also many lessons learned as the modular units other than BCTs made their appearance in the theaters.

CALL reports examined the operations of eight multi-functional support brigades that deployed to OIF or OEF.⁶³ Another source of lessons learned was the CASCOM Reverse-Collection and Analysis Team program. CASCOM assembled commanders and senior staff officers with experience in theater logistics organizations for OIF and OEF at Fort Lee, where they updated senior leaders and Army Logistics Management College students on their experiences in OIF. The briefings and comments by logistic commanders were turned into lessons learned, summarized by function below.

1. Aviation Support

Air mobility has been critical in OIF and OEF. The current Army force structure is organized with air assets to support major combat operations. Lessons learned indicate that it may be necessary for the Army to have additional air transport assets in the force structure to support CMO. Air delivery of logistical packages enabled widely dispersed units to conduct their missions. Delivery of humanitarian aid and evacuation of injured local nationals helped win hearts and minds. The impact of these kinds of actions cannot be measured directly, but they contribute to the success of a COIN operation.⁶⁴ This study did not address the aviation function directly, and the sources consulted did not comment on them.

2. Battlefield Surveillance

As indicated previously, Army units reported that the nature of the operating environment in Iraq made it necessary to adjust the relationship between intelligence and operations. In many operations, soldiers conducted raids, cordons and searches, and other types of operations in order to collect intelligence. This shift in the focus of operations resulted from a number of factors, the most important of which was the Army's effort to

⁶³. Unit Reports reviewed include the 4th Sustainment Brigade (OIF 2005-2006), 10th Sustainment Brigade (OEF 2006-2007), and 593rd Sustainment Brigade (OIF 2006-2007).

*The CALL report only covered the division headquarters and any attached brigades.

⁶⁴. Ball, COL Daniel L., Commander, 3d CAB, MND-C, Iraq, 17 April 2008, excerpt from Commander Interviews Volume I, CALL.

adapt and augment its traditional intelligence assets and methods so that tactical units could act in a decisive way.⁶⁵

Also noted earlier were other concerns about the capabilities of BCT intelligence assets to operate in a complex COIN environment. These include deficiencies in organic UAV coverage, imagery processing capability, signal intelligence collection capability, HUMINT analysis, HUMINT collection, counter intelligence (CI), and interrogation personnel for a brigade holding facility. These shortfalls in BCT capabilities may require the Corps headquarters to reapportion assets from other missions.

The frequent inability of U.S. forces in Iraq to provide what has been labeled “actionable intelligence”—that is, intelligence of current value and that will allow a unit to conduct significant operations immediately—forced a second shift in the Army’s traditional approach to operations. Rather than relying on the standard Cold War era military intelligence systems and procedures that gathered information at levels above the brigade and then “pushed” that information down to the tactical level, battalion and even company-sized units in Iraq conducted their own intelligence operations. This development runs counter to doctrine, and military intelligence professionals expressed concern about the lack of specialized training within the infantry, armor, and other battalions that were collecting their own intelligence. However, tactical commanders have had little choice. They operate in their assigned AOs and require accurate and timely information if they are to achieve their objectives.⁶⁶

Commanders at brigade and battalion levels quickly assessed the nature of the security environment in their AOs and initiated intelligence operations using their own soldiers and systems. This was a major shift in practice. U.S. Army doctrine gives military intelligence soldiers and units the formal authority to gather, analyze, and disseminate intelligence. The U.S. Army’s tactical units, however, have only a handful of military intelligence soldiers serving on the staffs of battalions and brigades. The military intelligence officers and NCOs at these levels historically have done little of their own collection and, other than the armor and infantry battalion S2 sections that could employ organic scout platoons to locate and watch enemy activity, had few assets with which to do collection. Instead, the Army designed the military intelligence system to push information from corps and division levels down to brigade and battalion levels where the S2 would make that intelligence relevant for the commander.

To make tactical-level military intelligence assets more capable, many units in Iraq reorganized their intelligence (G/S2) sections in 2003 and 2004 before modularity. At

⁶⁵. Extract from USA Combined Arms Center publication “On Point II Transition to the New Campaign: The United States Army in Operation IRAQI FREEDOM May 2003–January 2005,” 191.

⁶⁶. Extract from USA Combined Arms Center publication “On Point II Transition to the New Campaign: The United States Army in Operation IRAQI FREEDOM May 2003–January 2005,” 191–192.

division, brigade, and in some cases battalion level, this transition usually involved the creation of a G2X or S2X position for an officer or NCO who would focus solely on the collection and analysis of HUMINT. Unlike the SBCTs that deployed to Iraq, S2 sections in other tactical units did not have this capability, but when it became evident that HUMINT was critical to success in Iraq, commanders often decided to appoint an officer as the S2X.⁶⁷

3. Sustainment Support

A review of recent deployments of newly modular sustainment brigades by CALL indicates that workload-based design is sound and effective in giving the logistics community ample capability and capacity to accomplish the needed lift and haul to support the brigades-supported units. Most comments from the theater about the support provided by the sustainment brigades have been positive. The design also appears to work well within the theater sustainment command. Sustainment brigade transformation has increased CSS capacity to sustain kinetic operations while simultaneously conducting nonlethal operations.

The Modular Concept made a dramatic change in the echelonment of the Army in the field. Under Modularity, only brigades and the theater army have administrative and logistics responsibilities.⁶⁸ Within the Modular BCTs, almost all of the administrative and logistics functions are centralized in a support battalion, leaving the other battalions and companies almost entirely without an organic capability for supply, maintenance, transportation, and administration. The BCTs and other modular and functional brigades obtain their support directly from the theater sustainment system under a theater sustainment command headquarters. Sustainment units in the theater all report through intermediate logistical headquarters to the theater sustainment command, and corps and division commanders do not have to “bother” with providing this kind of support.

Arrangements for administrative and logistical support appear to work well in OIF and OEF, but not strictly in accordance with the Modular Concept as presented above. Division and corps commanders have been assigned areas of responsibility in both countries, and these areas have been organized into bases that function as logistical centers, providing support for collocated and visiting units that are moving around the AO. Thus, a Stryker battalion detached from its BCT support battalion can find fuel, food, water, some maintenance services, and possibly ammunition at the base supporting another BCT. Engineer units have been attached to BCTs or to other brigade headquarters in accordance with the overall plan for providing engineer support.

⁶⁷ Ibid., 197.

⁶⁸ See Table 1 on page 5 in this paper.

The Modular Force allows the Army to be flexible because it consists of many small units, each of which is staffed, equipped, and trained to perform a limited set of mission essential functions and provides a measurable amount of a particular set of capabilities. Two exceptions to this general theme are the BCTs and CABs, both of which are fixed designs. These two are modular units that were not intended to be task-organized in the theater, but have proven to be adaptable to doing that under pressure in most cases. All other parts of the Modular Force provide small units—teams, detachments, platoons, and companies—that are assembled into mission-oriented task forces as necessary according to the workload predicted.

E. Observations

This section provides some general observations on the employment of the Modular Force in Iraq and Afghanistan. There are many features of modularity that the Army is revisiting given that the Modular Force has been tested for six years of combat operations. Reports based on operations from 2006 to 2007 suggest that HBCTs and IBCTs are not as capable or responsive to mission requirements as the AoE Brigades they replaced. There is considerable sentiment in the Army that the Modular BCT design with two maneuver battalions does not possess sufficient maneuver capability and flexibility to execute required combat operations in a COIN campaign. The SBCT, in contrast, was thought to be well suited for employment in that kind of campaign because it has adequate maneuver capability, tactical mobility, and inherent flexibility.

1. Task Organization of BCTs in the Theater

The organic design of the BCTs was changed numerous times by field commanders who attached and detached maneuver battalions, RSTA battalions, and other elements of BCTs, as deemed appropriate for changing missions and new situations. As shown above in Table 7 through Table 9, corps and division commanders frequently moved maneuver battalions and RSTA battalions between brigades just as they would have done under the AoE organizational design. Organic combined arms composition seems not to have been the major factor that higher level field commanders valued in tailoring assigned forces for combat. BCT versatility and ability to make rapid mission transitions may be hindered by the organic combined arms composition of the BCT. Evidence indicates that the maneuver battalion, not the BCT, has become *de facto* the tactical commanders' essential building block when tailoring forces for combat. The field commanders deserve credit for task organizing as they saw fit without adhering to the modular design concept that discourages such changes. The force provider should acknowledge this and consider changes making it easier for the field commanders to task organize. If each BCT arrived with three maneuver battalions, it seems clear that very little task organizing would have been needed. The field commanders apparently did not want to take on the position the

Army adopted on modularity of the BCT, and were able to patch it over by asking for sufficient BCTs needed and just chopping them up to meet the theater needs.⁶⁹

2. Effect of Fixed BCTs on Flexibility

The Army sought, through its Modular reorganization, to change from a division-based to a brigade-based structure, and asserted it would provide field commanders the ability to make rapid mission transitions and thereby make the Army more versatile across the full spectrum of operations. The Army's traditional management approach to organizational change has been to seek flexibility, compatibility between its organizational structures and the conditions of the external environment, and open system structures that eschew "one size fits all" solutions. In the BCT case, organic combined arms composition was envisioned as being essential to the structure of the Army's combat forces, when the three standard BCT configurations were approved in 2004. The Army had decades of experience before it abandoned the regimental structure, which, like the Modular BCTs, featured permanent assignment of battalions to the regiments precisely, because that structure was deemed too inflexible. As we go forward, it may be time for the Army to reassess Modularity to see if the brigade-based organization provides the most flexibility and versatility for the Army. The roles of the Corps and Division have been greatly affected by the BCT-centric Army. They both have significant capabilities looking for missions and answers. It is hard to consider an MCO while still engaged in two COIN operations but it is necessary to consider whether infantry battalions or combined arms battalions can be transferred to another BCT and still be combat-effective regardless of the type of operation they are facing. Flexibility and versatility is not possible if the maneuver battalions are not capable of rapid movement among BCTs as the mission and situation dictate.

3. Outlook for Modularity

The last step in Modularity might be to decide where the Army wants to go or should go with this concept. It is important to agree that we are not there yet. The BCT can be made better and the Army in the field can be improved and become more flexible and versatile in the future.

Modularity makes it easier to task organize than the previous design primarily by extending to the combat support functions the devolution of fixed battalions into flexible battalions that was done earlier for the combat service support functions. Paradoxically,

⁶⁹ Email traffic between CENTCOM and IDA indicated the above in a review of a concept paper for improving the BCT organization as part of a continuation of the 2007 surge for a second year, if required.

while increasing the flexibility of the support functions, it has introduced fixed brigades for combined arms operations and retained fixed brigades for aviation operations.

This study of the behavior of the Modular Force in field operations is limited, and the data are insufficient to justify specific recommendations, but there is sufficient anecdotal evidence to justify continued objective analysis to determine what if any changes should be made to the Modular Force. Modularity is an attractive concept that fits well with the challenges the Army faces in the future. It can and ought to be made even better by making some adjustments based on operational experience.

3. Deriving A BCT Force Equivalent

A. Introduction

This chapter derives a BCT Force Equivalent (BFE) to serve as a tool to assess and design the Expeditionary Force, which is part of the Operating Force. The BFE includes the BCTs, non-BCT combat support units, combat service support units and theater forces. This part of the Army includes a wide variety of support unit types, and it is necessary to find a way to achieve a reasonable balance between BCTs and other “output” units (such as provincial reconstruction teams) requiring support and the set of combat support and combat service support units providing it. A good way of approaching this problem is to examine the actual combat to/support balance in recent operations.

The method used here is to first examine the previous Division Force Equivalent (DFE) as a conceptual model and then use recent experience in OIF as the basis for estimating a new BFE planning factor for the Modular Force. Doing this will provide the Army and OSD a useful tool for estimating the total number of military personnel needed to support overseas campaigns like the ongoing ones in Iraq and Afghanistan. That same factor could be used for helping design the Army. While the original DFE covered only military personnel, the modern BFE should take into account in-theater civilian employees and contractors as well.

B. The Division Force Equivalent

The DFE was used as a planning factor for sizing and understanding the Army from about 1963 to 2000. The DFE comprised a division along with a “theater slice” of additional combat, CS, and CSS units needed to sustain the division in a theater of operations. The DFE was originally based on WWII experience but was modified as the Army division and other force structure evolved and organizational and technical developments superseded operational experience as the basis for the planning factor.

Actual theater division slices—the average strength, including above division support per division in previous operations—are shown in Table 10. During World War II, the division slice was approximately 47,800 across all deployed forces but varied by theater (Europe or Pacific). During the Vietnam War, the theater division slice was higher at 51,700, due, in part, to requirements for advisory and logistic support functions unique to that war. For ODS it dropped to 43,400, but increased to 50,000 for the Initial Phase of OIF. A key variable in all of these campaigns has been how much support the Army has

been required to provide to the Marine Corps, Air Force, or allied forces in the theater. For OIF and OEF, a theater division slice would also be affected by the use of numerous soldiers to provide for training host nation forces and conduct stability operations.

Table 10. Selected Theater Division Slices from Previous Wars

	World War II Jun 1944	Vietnam War Feb 1969	First Gulf War Feb 1991	OIF – Initial Phase Mar 2003
Divisions	89	7	7	4
Deployed Military Strength	4,255,000	362,000	304,000	200,000
Theater Division Slice	47,800	51,700	43,400	50,000
Average Division Strength	12,300	18,000	17,000	16,000
Non-Divisional Unit Strength	35,500	33,700	26,400	34,000

In its most recent version, the DFE was considered by the Army to be 40,000 military manpower spaces. The size of this DFE was determined more by conceptual analysis, models, and simulations than by historical experience. This DFE was subdivided into a division increment (DI) of 15,000 spaces, a non-divisional combat increment (NDCI) of 8,000 spaces and a tactical support increment (TSI) of 17,000 spaces. The NDCI included a separate combat brigade, or ACR corps artillery, theater air defense, combat aviation, and combat engineer units. The TSI included theater and corps support commands, signal units, intelligence, and other combat support, combat service support, and personnel service support units.

The DFE was useful to estimate the strength of an Army force required in a given theater for a specific campaign. For example, given the requirement to provide a combatant commander a corps of four divisions, the gross strength of the Army component using the most recent DFE of 40,000 would be 160,000 military personnel. The DFE was also useful for assessing the efficacy of potential organizational or technological initiatives. Essentially, the DFE was a model of a typical balanced set of units necessary to field, support, and sustain a division, including those at echelons above the division.

Prior to the transformation of Army forces in the early 1980s, divisions had roughly 16,000 military personnel. These large divisions were considered to be too cumbersome to assure rapid response to threats to U.S. national security interests. Organizational initiatives, such as moving some functions (e.g., personnel management and mortuary services) from the division to the corps served to make the division smaller. Technological advances, such as replacing many FA howitzer battalions with the more effective multiple launch rocket system (MLRS) battalions, reduced the number of artillery personnel while providing better fire support. For communications, mobile

subscriber equipment provided improved service with fewer soldiers. These kinds of improvements were a basis for modifying the design strength of the DFE. This was particularly true for TSI whose strength was largely workload-driven. For example, the M1 tank, while significantly superior in armor capability to its predecessor, the M60 tank, consumed considerably more fuel. Also, the M1 tank could travel long distances rapidly. So keeping up with it logistically was an additional workload. The increased demand for fuel was met by providing more and larger fuel trucks, and these generated a requirement for more drivers and mechanics and more refueling points, which in turn, generated requirements for security. The introduction of the Patriot missile system brought its own set of demands to be incorporated into the DFE.

The DFE not only provided a basis for force design but also served as a constraint for force managers seeking to introduce new or additional capabilities into the force structure. As the DFE became more and more dependent on analysis than on experience, its use as a planning factor diminished. However, the need for such a planning factor remains. Because of the changes made in Army organization and in the nature of warfare since the end of the Cold War, the former DFE estimates are no longer valid. A new experiential basis is necessary. And for some aspects of high-intensity conflict, and especially stability operations, there is relevant recent experience.

C. BCT Force Equivalent

The advent of Modularity and the deployment of BCTs and other Modular Force units into OIF makes it possible to establish a BFE that can be used to assess and organize the design and balance of the Modular Army. The BFE can be based on data generated over the past five years that portray experiential reality. These data are largely the product of a COIN campaign. Suitably understood, the BFE derived from this experience can be modified to apply also to major conventional operations.

A BFE is defined as a BCT and a proportionate share of all headquarters, combat support, and combat service support units in a theater. At the end of June 2008, there were approximately 180,000 Army troops in Iraq and Kuwait that were supporting 20 BCT equivalents. It is assumed that the average strength of the BCT is 3,600 military personnel.

The calculations are as shown in Table 11.

Table 11. BFE Strength Calculations

Total Military Strength in the Theater	
Iraq	120.0
Kuwait	60.0
Total Strength	180.0
Supported Strength in the Theater	
13 Active BCTs @ 3.6 each	46.8
5 ARNG BCTs @ 3.6 each	18.0
2 USMC RCTs @ 3.6 each	7.2
Total Supported Strength	72.0
Supporting Strength (Total Strength – Total Supported Strength)	108.0
Supported to Supporting Ratio (Total Supported Strength:Supporting Strength)	1:1.5
Support per BCT (3.6 x 1.5)	5.4
BFE strength (3.6 + 5.4)	9.0*

All strength data are in thousands of personnel.

*This calculation is the equivalent of a BFE equal to 9,000 military personnel.

The next step is to consider the effect of contractor support on the BFE. About 100,000 man-years of contractor effort was available in the theater in June 2008. It is asserted that these man-years convert to the equivalent of 75,000 military support personnel. All of the theater contractors are assigned to the CSS functions, although a few are providing security for individuals and facilities. Until there is better information about how many contractors there are, what they are doing, and how well they are doing it, these assumptions can be used.

When the impact of 75,000 additional support personnel is considered, the calculation is as shown in Table 12.

Table 12. BFE Strength Calculations w/ Additional Support Personnel

Supported Military Strength	72.0
Supporting Military Strength	108.0
Supporting Contractor Strength	75.0
Total	255.0
Revised Supported to Supporting Ratio (72:183)	1:2.5*

All strength data are in thousands of personnel.

*This calculation is the equivalent of a BFE equal to 12,500 personnel.

Based on 20 BCTs or equivalents in the theater, each BCT has 5,000 contractor man-years, or 3,750 military personnel equivalent, in support.

Two planning factors have emerged from this process. Based on recent experience in Iraq, it takes, in addition to a BCT with 3,600 troops, another 5,400 military personnel and 3,750 military personnel equivalents provided by contractors to support each BCT for stability operations. There are several uncertainties in these estimates that need to be addressed and modified as necessary. These include the following:

- Total military personnel strength in Iraq and Kuwait by Service needs to be verified and distributed over time.
- Units that provide “output” should be added to the supported total. These include troops used for training and advising Iraqi forces, providing border security, and providing reconstruction and civil support. These units do not support the BCTs but do add to the effectiveness of the campaign. The numbers of military personnel engaged in these kinds of tasks needs to be shown.
- The validity of including Marine Corps Regimental Combat Teams (RCT) in the “supported” category is questionable. Marine Forces do have some combat service support capabilities, but also rely extensively on the Army for backup support. Including the Marine Corps in the estimating process takes that support into consideration.

The figures do not take into account the presence in the theater of some DOD civilian employees. This number is estimated at about 5,000, so the impact on the BFE is small, but the next set of calculations should show this explicitly.

D. Observations

Better data are needed and assumptions should be examined and perhaps revised. The Army has shown interest in making these improvements. This work should proceed expeditiously. In the meantime, the IDA study team considers the 9,000-person BFE a reasonable estimate for assessing the adequacy of authorized Army personnel strength to sustain full-spectrum operations, and uses this planning factor for that purpose in Chapter 12.

Section II: Emerging Needs for Stability Operations

“Irregular Warfare” (IW) was and is an area of interest to IDA’s sponsor. The IDA task was to address the concept of IW and explore issues related to waging it. It soon became clear that this term was used mostly to differentiate from an opposite form of warfare. That is, irregular warfare was not “regular warfare” and not “conventional warfare.” There is a lot of material on this topic but no consensus. This section uses official Army doctrine and other DOD documents as the basis for the assessment and think piece on Stability Operations (SOs). There are four chapters in this section.

Chapter 4 derives a Spectrum of Operations to provide a basis for understanding IW. This was necessary to show how IW relates to other operations and to provide a way to describe an Army that could conduct Full-Spectrum Operations. It was found that there is no official Spectrum of Operations to which all DOD components subscribe. The process of defining a spectrum starts with the Army’s current spectrum (offense-defense-stability operations-civil support) and incorporates five “operational themes” to provide an initial spectrum with five major operational categories. The next step is to add two major operational categories and modify the content and order of all of the operational categories to improve consistency and utility. The modified Spectrum of Operations has eight major operational categories and is used as the basis for subsequent analyses.

Chapter 5 presents a detailed description of the various forms of IW based on official documents from several communities of interest. The essential finding of this literature survey is that there are multiple versions of IW, all of which more or less cover the same things. The corollary to this finding is that it is possible to distill from these different versions an integrated approach that can provide a basis for organizing the provision of IW capabilities across the Spectrum of Operations.

Chapter 6 discusses how the Army can provide the eight major IW capabilities postulated in Chapter 5. These IW capabilities are incorporated into the Army’s warfighting functions and the unit types that provide IW capabilities are identified. Then, various means of integrating these unit types into the Army in the field are discussed.

Chapter 7 considers how the Army (and DOD) can institutionalize the management and provision of IW capabilities to eliminate some of the problems that exist and integrate the various IW communities into a composite organization that can assure the proper development and retention of units and personnel able to provide the necessary amounts and kinds of IW capabilities when needed.

4. Defining the Spectrum of Operations

A. Introduction

This chapter defines and discusses a new spectrum of operations that addresses separate major operational categories in a way that simplifies understanding of their conduct. In order to consider an Army that can conduct Full-Spectrum Operations, it was necessary to determine what exactly that spectrum comprises. There are several spectra—a Spectrum of Warfare, a Spectrum of Threats, and a Spectrum of Conflict. However, these are not very relevant for designing the Army Force Structure. In this study, the focus is on operations that must be prepared for, resourced, and conducted.

Using the operation as the basis for establishing and ordering capabilities avoids much of the taxonomical disorder that pervades this field of inquiry. An operation is bounded in time and space, has a mission, is conducted by functions, and is accomplished by units performing tasks. That is not to say that it is easy to categorize operations, since there are numerous kinds, types, and variations that overlap and have small distinctions. There is also disparity among the various categories of operations set forth as DOD, Joint Staff, or Army doctrine. New terms and schemes introduced by new people are often superimposed on previous terms, creating even more confusion. The approach of this chapter is to start with the Army's doctrinal Spectrum of Operations stated in Field Manual 3-0, Operations, and expand its scope to be consistent with other aspects of the Army's doctrine.

Although Army doctrine and definitions were the starting point for this analysis, some modifications were applied as the process moved forward. It was useful to consult and insert other operations and categories as defined by the Office of the Secretary of Defense and the Joint Staff. However, primary reliance was placed on Army terminology and Army definitions.

B. The Initial Spectrum

The Army identifies the four elements of Full-Spectrum Operations as offense, defense, stability operations, and (for domestic operations) civil support. The Army also identifies four operational themes, each of which “describes the character of the dominant major operation (other than [Major Combat Operations]) being conducted at any time within a land force commander's area of operations. The operational theme helps convey the nature of the major operation to the force to facilitate common understanding of how

the commander broadly intends to operate.”⁷⁰ The four operational themes are Peacetime Engagement, Limited Interventions, Peace Operations, and Irregular Warfare.⁷¹ The Army’s “Full-Spectrum Operations” has been renamed “Major Combat Operations,” with sub-categories of offense and defense. These operational themes, listed below, have been combined to form the Initial Spectrum of Operations:

- Peacetime Engagement Operations
- Limited Intervention Operations
- Peace Operations
- Irregular Warfare Operations
- Major Combat Operations
 - Offense
 - Defense

Each of these five major operational categories is expanded in the following analysis to show the specific operations included in each according to Army Doctrine.

1. Peacetime Engagement Operations

Peacetime Engagement Operations are “military activities that involve other nations and are intended to shape the security environment in peacetime.”⁷² They are managed by OSD through the Defense Security Cooperation Agency, and the regional combatant commands in their respective theaters of operations. Much of the work is done by military missions and military groups attached to U.S. embassies and training teams on temporary duty in the theater. Theater commanders are required to have Theater Engagement Plans that set goals and lay out actions to be taken to foster good relations among the nations in their respective theaters. General Purpose Forces (GPF) and Special Operations Forces (SOF) contribute to this effort through training programs and working with indigenous forces, participating in combined exercises, supporting exchange programs, providing humanitarian assistance, and helping other nations deal with the consequences of terrorist attacks. Peacetime Engagement Operations do not have major force structure implications for the Army, but do require a small number of skilled Army personnel. Combat is not envisioned in these operations, but attacks may occur. Table 13 shows the operations that fit into this category.⁷³

⁷⁰ Department of the Army Field Manual 3-0, (henceforth FM 3-0), Operations, February 2008, 2-3.

⁷¹ FM 3-0, 3-1.

⁷² FM 3-0, 2-5.

⁷³ FM 3-0, 2-7 to 2-8.

Table 13. Sub-Categories of Peacetime Engagement Operations

Sub-Category	Description/Purpose
Training Events and Exercises	Demonstrate capabilities; improve interoperability; build military-to-military ties with other nations
Security Assistance	Support for foreign military assistance and international military education and training programs that allow foreign personnel to attend U.S. schools
Exchange Training	U.S. personnel attend foreign schools and serve in foreign forces, and foreign personnel serve in U.S. units
Recovery Operations	Search, locate, identify, recover, and return personnel, human remains, or sensitive items to U.S. control
Arms Control	Support multilateral arms control agreements that prohibit some weapons and illegal trafficking in arms
Counterdrug Activities	Measures taken to detect, interdict, disrupt, or curtail any activity related to illicit drug traffic into the United States

2. Limited Intervention Operations

Limited Intervention Operations (LIO) includes several very different kinds of operations that are grouped together for convenience. They have many common features but differ in their missions and in the context in which they are undertaken. They may require special capabilities for combat or “soft” power. Each is unique in the sense that tactics and techniques have to be adapted to specific goals in specific situations. The Army defines LIO as follows:

Limited interventions are executed to achieve an end state that is clearly defined and limited in scope. Corresponding limitations are imposed on the supporting operations and size of the force involved...These operations may be phased but are not intended to become campaigns.⁷⁴

Table 14 shows the sub-categories of LIO.⁷⁵

⁷⁴. FM 3-0, 2-7.

⁷⁵. FM 3-0, 2-7.

Table 14. Sub-Categories of Limited Intervention Operations

Sub-Category	Description/Purpose
Non-Combatant Evacuation Operations	Extract U.S. nationals, employees, and selected others from a dangerous situation in a foreign country
Strike	Attack to damage or destroy an objective or capability
Raid	Seize an area temporarily to confuse an adversary, secure information, capture personnel or equipment, or destroy a capability
Show of Force	Place military forces in a region or area to demonstrate resolve, defuse a situation, or influence an outcome
Foreign Humanitarian Assistance	Operations to relieve or reduce the effects of natural or manmade disasters or other conditions that pose a threat to life or damage to property in foreign countries
Consequence Management	Actions taken to maintain or restore essential services and mitigate problems resulting from natural disasters and terrorist attacks
Sanction Enforcement	Employ coercive measures to interdict movement of designated items into or out of a nation or specific area
Elimination of WMD	Locate, identify, secure, disable, or destroy state or non-state WMDs and related capabilities

LIO involve the use of force or a readiness to use force if necessary to accomplish the mission. They have different focuses (non-combatants, distressed people, enemy weapons of mass destruction) but are similar in the way they are conducted. They may occur as unique stand-alone events or as part of larger battles and campaigns. They tend to use relatively small forces but may require a larger task force with one or more BCTs. They are often conducted on short notice without a lengthy period of preparation and staging. They can be accomplished by existing SOF or GPF. LIO have no major force structure implications for the Army.

3. Peace Operations

Peace Operations consist of “multi-agency and multinational crisis response and limited contingency operations involving all instruments of national power with military missions to contain conflict, redress the peace, and shape the environment to support reconciliation and rebuilding and facilitate the transition to legitimate government.”⁷⁶ They are normally conducted under the auspices of the United Nations, NATO, or another multi-national coalition or agreement. The military role in peace operations is to support multi-agency operations by providing a military presence and security as needed.

⁷⁶. FM 3-0, 3-0.

Combat operations are not envisioned, but attacks on peace operations forces may occur. The objectives of peace operations are to limit and reduce violence among contending factions. Peace operations are conducted by combatant commanders and their staffs, U.S. missions at international headquarters, and U.S. embassies, sometimes augmented by special teams to support negotiations. The sub-category of Peace Enforcement has been moved from Peace Operations to the LIO category because it may involve the initiation of force. The sub-categories of Peace Operations are shown in Table 15.

Table 15. Sub-Categories of Peace Operations

Sub-Category	Description/Purpose
Peacekeeping	Military operations conducted with the consent of the parties to monitor and facilitate implementation of a cease fire, truce, or other agreement
Peace building	Mostly diplomatic and economic actions to strengthen governments and institutions to avoid relapse into conflict in the aftermath of a peace agreement
Peacemaking	The process of diplomacy, mediation, and negotiation undertaken to bring an end to a dispute or conflict
Peace Enforcement	Use or threat of use of military force to compel compliance with agreements designed to maintain or restore peace and order
Conflict Prevention	Actions taken before a crisis to prevent or limit violence, deter conflict, and reach agreement before hostilities commence

For the most part, peace operations are carried out by GPF and may require special training. They do not, however, have major force structure implications for the Army. They tend to be small in size, and some may require the same kinds of soft power skills as used in SOs (see page 75). In many respects, these operations resemble LIOs.

4. Irregular Warfare (IW) Operations

IW comprises a set of similar operations that depart from the popular understanding of MCOs. Many have been recognized for a long time under other names. Having a capability to conduct all forms of IW Operations has significant force structure implications.

The starting point for understanding this concept is with IW itself, which is defined by DOD as follows:

A violent struggle among state and non-state actors for legitimacy and influence over the relevant population(s). Irregular warfare favors indirect and asymmetric approaches, though it may employ the full range of

military and other capacities in order to erode an adversary's power, influence, and will. This is also called IW.⁷⁷

The Army definition of IW is as follows:

Irregular warfare encompasses operations in which the joint force conducts protracted regional and global campaigns against state and non-state adversaries to subvert, coerce, attrite, and exhaust adversaries rather than defeat them through direct conventional military confrontation. Irregular warfare emphasizes winning the support of the relevant populations, promoting friendly political authority, and eroding adversary control, influence, and support.⁷⁸

Both of the definitions above imply that IW is a broad term that encompasses operations not found in its opposite category—regular warfare or conventional warfare. This broad approach could include under this category all of the operations in the foregoing categories of Peacetime Engagement Operations, Peace Operations, and Limited Intervention Operations.

According to Army doctrine:

Special operations forces conduct most irregular warfare operations. Sometimes conventional forces support them; other times special operations forces operate alone. However, if special operations forces and host nation forces cannot defeat unconventional and irregular threats, conventional Army forces may assume the lead role.⁷⁹

There are several ways to understand IW. One is to consider it to be operations that deal one way or another with insurgencies. Another is to consider combat with nation states as regular and combat with trans-national organizations (e.g., terrorists) as irregular. Yet another way is to regard IW Operations as what we are doing now in Iraq and Afghanistan. This semantic issue was addressed by examining each of the operations in the IW Operational Category shown in Table 16 and then determining how they relate to one another and to MCOs.

⁷⁷. Joint Publication 1-02 DoD Dictionary of Military and Associations, 31 October 2009

⁷⁸. FM 3-0, 2-10 Operations, February 2008.

⁷⁹. FM 3-0, 2-10.

Table 16. Sub-Categories of Irregular Warfare Operations

Sub-Category	Description/Purpose
Counterinsurgency	Military, paramilitary, political, economic, psychological, and civil actions taken to assist a host nation to defeat an insurgency
Support to Insurgency	Support insurgencies against regimes that threaten U.S. interests
Foreign Internal Defense	Assist a host nation government to free and protect its society from subversion, lawlessness, and insurgency by direct or indirect means
Unconventional Warfare	Train and support indigenous or surrogate forces to conduct sustained military and paramilitary operations
Combating Terrorism	Actions taken to reduce vulnerability to terrorist acts and prevent, deter, and respond to such acts and mitigate their consequences
Low-Intensity Conflict	A protracted political-military struggle that does not rise to the level of a war carried out by conventional means
Stability Operations	Actions taken to improve security and governance in a host nation or enemy territory
Civil-Military Operations	Establish collaborative relationships among military forces, civilian organizations and authorities, and the civilian populace in an operational area in order to facilitate military operations

Counterinsurgency is the sub-category of IW Operations that is most general and perhaps most important; it conveys the essence of IW. The Army characterizes counterinsurgency as follows:

In counterinsurgency, host-nation forces and their partners operate to defeat armed resistance, reduce passive opposition, and establish or reestablish the host-nation government's legitimacy.⁸⁰

DOD defines an insurgency as an “organized movement aimed at the overthrow of a constituted government through use of subversion and armed conflict.”⁸¹ Insurgencies can be conducted either apart from or in conjunction with a broader campaign or conventional war. Thus, an insurgent campaign may be a separate conflict (as in Sri Lanka) or part of a Global Jihad (as in Afghanistan). Insurgencies often occur as part of a mostly conventional war, as exemplified by Russian partisan operations behind German lines in World War II. A good description of insurgency found in FM 3-0 states that:

Insurgents try to persuade the populace to accept the insurgents' goals or force political change. When persuasion does not work, insurgents use other methods to achieve their goals. These may include intimidation, sabotage, and subversion, propaganda, terror, and military pressure. Sometimes insurgents attempt to organize the populace into a mass

^{80.} FM 3-0, 2-11.

^{81.} Department of Defense, Joint Publication 1-02 Department of Defense Dictionary of Military and Associated Terms, 2007.

movement. At a minimum, they aim to make effective host-nation governance impossible. Some insurgencies are transnational. Other situations involve multiple insurgencies underway in an area at the same time.⁸²

Counterinsurgency operations generally are conducted at the small unit level—squad, platoon, or company—in the context of a higher-level campaign plan. The people in the area are the center of gravity. Their support is essential for success. These operations are also designed to promote the authority of the host nation government and to develop the infrastructure and the economy of the host nation.

Support to Insurgency is the opposite of counterinsurgency. This kind of operation may be conducted when the U.S. seeks to disrupt and diminish the capability of an adversary or enemy state or change the regime to one that is friendlier. Many capabilities required for these kinds of operations are similar to those needed for counterinsurgency, with a significant change in focus.

Foreign Internal Defense (FID) has two forms. Indirect support operations reinforce the host nation legitimacy and primacy through inconspicuous actions that emphasize host nation self-sufficiency through economic and military programs. It is performed by means of security assistance, multi-national exercises, and exchange programs. Direct support adds operational planning assistance, civil affairs activities, intelligence and communications sharing, logistics, training of host nation military forces, and limited combat operations for force protection.⁸³

Unconventional Warfare (UW) operations are a major function of Special Forces units. The current definition of UW is:

A broad spectrum of military and paramilitary operations, normally of long duration, predominantly conducted through, with or by indigenous or surrogate forces who are organized, trained, equipped, supported, and directed in varying degrees by an external source. It includes, but is not limited to, guerrilla warfare, subversion, sabotage, intelligence activities, and unconventional assisted recovery.⁸⁴

Combating Terrorism involves the use of both offensive and defensive means to deter and prevent attacks and to deal with them if they occur. There are two distinct kinds of operations in this sub-category. **Counterterrorism** operations include offensive measures to prevent, deter, detect, disrupt, disarm, and/or destroy terrorists and their weapons. This may be done by means of strikes, raids, or other combat operations outside the U.S. Counterterrorism is an assigned mission for SOF but may also be accomplished

⁸². FM 3-0, 2-11.

⁸³. FM 3-0, 2-10.

⁸⁴. FM 3-0, 2-12.

using GPF. **Antiterrorism** operations include defensive measures to reduce the vulnerability of people and property to terrorist attacks. Antiterrorism is the responsibility of commanders at all levels and locations and is part of force protection.

Low-Intensity Conflict (LIC) is a term that has been in use for a long time and that includes many if not most of the elements considered today to constitute IW. LIC is defined as follows:

Low intensity conflict is a political-military confrontation between contending states or groups below conventional war and above the routine, peaceful competition among states. It frequently involves protracted struggles of competing principles and ideologies. Low intensity conflict ranges from subversion to the use of armed force. It is waged by a combination of means, employing political, economic, informational, and military instruments. Low intensity conflicts are often localized, generally in the Third World, but contain [sic] regional and global security implications.⁸⁵

Stability Operations are considered by the Army to be one of the four elements of Full-Spectrum Operations (along with offense, defense, and civil support). They have been included in this construct under IW Operations, and are defined as follows:

Stability Operations encompass various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or establish a safe and secure environment, provide essential governmental services, support emergency infrastructure reconstruction, and provide humanitarian relief.⁸⁶

The primary tasks of Stability Operations are civil security, civil control, restoration of essential services, support to governance, and support to economic and infrastructure development. The emphasis of Stability Operations is on creating relationships with a host nation or nations that facilitate the conduct of MCOs. However, many of the tasks to be performed are the same as those for counterinsurgency, except for the absence of an insurgency against the host nation government or U.S. troops. Table 17 shows a list of the primary tasks to be performed under the general rubric of Stability Operations.⁸⁷

⁸⁵. Department of the Army Field Manual 100-20, Military Operations in Low-Intensity Conflict, December 1990.

⁸⁶. Department of the Army Field Manual 3-07, Stability Operations, October 2006, vi.

⁸⁷. Army Field Manual 3-07, Stability Operations, October 2008, 3-2 to 3-20.

Table 17. Primary Tasks for Stability Operations

Civil Security

- Enforce Cessation of Hostilities, Peace Agreements, and Other Arrangements
- Determine Disposition and Constitution of National Armed and Intelligence Services
- Conduct Disarmament, Demobilization, and Reintegration
- Conduct Border Control, Boundary Security, and Freedom of Movement
- Support Identification
- Protect Key Personnel and Facilities
- Clear Explosives and CBRN Hazards

Establish Civil Control

- Establish Public Order and Safety
- Establish Interim Criminal Justice System
- Support Law Enforcement and Police Reform
- Support Judicial Reform
- Support Dispute Resolution Processes
- Support Corrections Reform
- Support War Crimes Courts and Tribunals
- Support Public Outreach and Community Rebuilding Programs

Restore Essential Services

- Provide Essential Civil Services
- Assist Dislocated Civilians
- Support Famine Relief
- Support Nonfood Relief Programs
- Support Humanitarian Demining
- Support Human Rights Initiatives
- Support Public Health Programs
- Support Education Programs

Support to Governance

- Support Traditional Institutions
- Support Development of Local Governance
- Support Anticorruption Initiatives
- Support Elections

Support to Economic and Infrastructure Development

- Support Economic Generation and Enterprise Creation
- Support Monetary Institutions and Programs
- Support National Treasury Operations
- Support Public Sector Investment Programs
- Support Private Sector Development
- Protect Natural Resources and Environment
- Support Agricultural Development Programs
- Restore Transportation Infrastructure
- Restore Telecommunications Infrastructure
- Support General Infrastructure Reconstruction Programs

Civil-Military Operations (CMO) are the “primary military instrument to synchronize military and nonmilitary instruments of national power, particular in support of stability, counterinsurgency, and other operations dealing with ‘asymmetric’ and ‘irregular’ threats.”⁸⁸ The Joint Staff defines CMO as follows:

The activities of a commander that establish collaborative relationships among military forces, governmental and nongovernmental civilian organizations, and authorities, and the civilian populace in a friendly, neutral, or hostile operational area in order to facilitate military operations are nested in support of the overall US objectives. CMO may include performance by military forces of activities and functions normally the responsibility local, regional, or national government[s].

CMO, as defined, apply to almost all of the various operations discussed above under different headings, albeit with a slightly different set of terms. CMO can be considered a function of command to be performed in all operations rather than a separate kind of operations. The difference is that a major focus of CMO is on what Civil Affairs units do.

The purpose of CMO is to facilitate military operations, and to consolidate and achieve operational US objectives through the integration of civil and military actions while conducting support to civil administration, populace and resources control, foreign humanitarian assistance, nation assistance and civil information management.⁸⁹

5. Major Combat Operations

MCOs are large operations in which the mission is to destroy, disrupt, and demoralize enemy forces and seize and hold key terrain. They are a principal focus of the Army and can engage most of the Army’s Expeditionary Force in one way or another. These operations are large in scope and require a massive commitment in money and troops. While they are typically initiated by one or both sides figuring to win quickly, they often result in protracted conflict. In the current context, both OIF and OEF are MCOs, but also IW. ODS, in 1991, is an example of an MCO that was a quick win. The Army also cites Operation Urgent Fury (Grenada) in 1983 and Operation Just Cause (Panama) in 1989 as MCOs that were both relatively small and obtained quick wins.⁹⁰ MCOs are considered by the Army to consist of offensive operations, defensive operations, and stability operations.

⁸⁸. Joint Publication 3-57, Civil-Military Operations, 8 July 2008, vii. This term is not found in the index of FM 3.

⁸⁹. Army Field Manual 3-07, Stability Operations, October 2008, I-10.

⁹⁰. FM 3-0, 2-13. One might classify Grenada and Panama as “minor combat operations,” but that just complicates matters more without having any particular virtue.

MCOs are the high end of the Spectrum of Operations. The Army does not refer to Conventional Warfare Operations as such.⁹¹ There appears to be no current official definition of conventional warfare operations by either DOD or the Army. A popular definition of Conventional Warfare from Wikipedia appears as follows:

Conventional warfare is a form of warfare conducted by using conventional military weapons and battlefield tactics between two or more states in open confrontation. The forces on each side are well-defined, and fight using weapons that primarily target the opposing army. It is normally fought using conventional weapons, not chemical, biological, or nuclear weapons. The general purpose of conventional warfare is to weaken or destroy the opponent's military force, thereby negating its ability to engage in conventional warfare.⁹²

DOD defines an MCO as:

the conduct of synergistic, high-tempo actions in multiple operating domains, including cyberspace, to shatter the coherence of the adversary's plans and dispositions and render him unable or unwilling to militarily oppose the achievement of U.S. strategic objectives.⁹³

The Army does not define MCOs as such but describes them as follows:

Major Combat Operations occur in circumstances usually characterized as general war [among] states, alliances, or coalitions...Combat between large formations characterizes these operations...These operations typically entail high tempos, high resource consumption, and high casualty rates....Successful major combat operations defeat or destroy the enemy's armed forces and seize terrain.⁹⁴

The inclusion of stability operations in MCOs indicates that the Army realizes it is desirable to have a base in a stable and friendly host nation or nations to conduct offensive and defensive operations in "conventional warfare."

6. Initial Spectrum of Operations

When the initial Army-based spectrum is completed with the operations for each identified, the result is the Initial Spectrum of Operation in Table 18, which is an expanded version of the spectrum as stated in FM 3-0.

⁹¹. The term "conventional warfare" was used during the Cold War to differentiate non-nuclear operations from "nuclear warfare."

⁹². www.wikipedia.com, "Conventional Warfare," 5 February 2009.

⁹³. QRM Report, 5.

⁹⁴. FM 3-0, 2-13.

Table 18. Initial Spectrum of Operations

Peacetime Engagement Operations	Limited Intervention Operations	Peace Operations	Irregular Warfare Operations	Major Combat Operations
Training Events and Exercises	Noncombatant Evacuation	Peacekeeping	Counterinsurgency	Offensive Operations
Security Assistance	Strike	Peace building	Support to insurgency	Defensive Operations
Exchange Training	Raid	Peacemaking	Foreign Internal Defense	Stability Operations
Recovery Operations	Show of Force	Peace Enforcement	Unconventional Warfare	Civil Support
Arms Control	Foreign Humanitarian Assistance	Conflict Prevention	Counter-Terrorism	
Counterdrug Activities	Consequence Management		Anti-Terrorism	
	Sanction Enforcement			
	Elimination of WMD			

C. A Modified Spectrum of Operations

During the process of describing the contents of the Initial Spectrum of Operations, it was found that the Spectrum could be improved by making some modifications to the operational categories. Some of these modifications are minor, but a few are consequential and are important to achieving an understanding of warfare. The potential changes in the spectrum to rationalize inconsistencies are discussed below.

1. Establish Domestic Civil Support as a Major Operational Category

The provision of Defense Support to Civil Authorities (DSCA) is important enough to be a major operational category for the Army. In the Modified Spectrum, the Army sub-categories are used to differentiate different kinds of civil support. Civil Support is listed as a sub-category of MCOs in the initial spectrum but will be considered a separate major operational category. The name is changed to Domestic Civil Support Operations to distinguish these from foreign consequence management operations.

DSCA (often referred to as Civil Support or CS) includes resources and assistance provided by DOD and the Army to support domestic operations in response to natural disasters, attacks, civil disorders, or other events beyond the capability of the other federal departments and agencies and state, local, and tribal governments. The Army lists Civil Support as one of the four major elements of major combat operations, but they

have been made a separate category in the Modified Spectrum because they occur within the United States. Domestic Counter-Drug Operations have been moved to this category. The four other sub-categories of Domestic Civil Support Operations are shown in Table 19.⁹⁵

Table 19. Sub-Categories of Domestic Civil Support Operations

Sub-Category	Description/Purpose
Disasters and Declared Emergencies	Support Department of Homeland Security (DHS) by participating in response operation for natural disasters and emergencies as specified in the National Response Framework
Restore Public Health and Services and Civil Order	Conduct civil disturbance operations and other actions as directed by the President, to include border security, animal disease control, critical infrastructure protection, and other disruptive events
Special Events	Support conduct of national special security events, such as the Olympics, Super Bowl, Inaugurations, and also other events, such as a Boy Scout Jamboree or the World Series
Periodic Planned Support	Support other federal agencies and state and local governments routinely on an agreed basis to enhance civil-military relations and provide immediate assistance in response to time-urgent requests for assistance in dealing with minor emergencies

DOD routinely provides a great deal of support to the other federal departments and agencies that is not always apparent. For example, DOD is a major player in providing security for inaugurations, Olympics, and Super Bowls. DOD provides support for responding to hurricanes, fighting wildfires, performing Antarctic exploration, and in numerous other lesser instances. This routine support is for the most part paid for by special program funding and is usually a temporary diversion of DOD assets from their primary missions.⁹⁶ These operations are usually short-lived and do not significantly disrupt DOD operations.

The most important Domestic Civil Support Operations DOD would be involved in are supporting the Department of Homeland Security (DHS) in response to a catastrophic emergency. Catastrophic response operations could involve the employment of many thousands of federal troops over a period of several weeks or longer. The Air Force, Marine Corps, and Navy are also involved in response operations, but the Army customarily provides the bulk of the troops. Most of these troops can be GPF diverted temporarily from their other missions, but the Army may be asked to provide special capabilities that are not available in sufficient amounts from other sources. There are

⁹⁵. Department of the Army, How the Army Runs, Chapter 22, Defense Support of Civil Authorities, December 2008, 469-471.

⁹⁶. How the Army Runs, Chapter 22, Defense Support of Civil Authorities, provides a detailed description of this category of operations.

significant force structure and skill set implications for the Army with respect to this category of operations. Capabilities needed for Domestic Civil Support Operations are addressed in Chapter 10.

2. Establish Homeland Defense as a Major Operational Category

A separate Major Operational Category has been established for Homeland Defense, which is not listed in FM 3-0, and is often closely linked to Civil Support, as in Homeland Defense/Civil Support “HD/CS.” However, although the two kinds of operations are often linked, they are different. Homeland Defense Operations are the responsibility of DOD, which is supported, as appropriate, by civil agencies. For Civil Support Operations, DOD is in support of DHS or other civil agency, depending on the kind of support provided.

Homeland Defense Operations are conducted to protect and secure the United States, Puerto Rico, the U.S. Virgin Islands, and its territories in the Pacific from attack by state or non-state forces or terrorists. Homeland Defense Operations are defined as:

Operations [that] help ensure the integrity and security of the homeland by detecting, deterring, preventing, or if necessary, defeating threats and aggression against the United States as early and as far from its borders as possible so as to minimize their effects on U.S. society and interests.⁹⁷

Homeland Defense Operations are military operations commanded by the President, Secretary of Defense, and the Commanders of the U.S. Northern Command, U.S. Pacific Command, and the U.S. Space Command. In Civil Support Operations, DOD and the Army support the Department of Homeland Security or other agencies. Table 20 shows the sub-categories of Homeland Defense.

Table 20. Sub-Categories of Homeland Defense Operations

Sub-Category	Description/Purpose
Missile Defense	Defend the U.S. against ballistic missile attack and participate in space operations under the U.S. Space Command
Cyber Defense	Defend against hostile attacks on U.S. communications networks
Aerospace Defense	Detect, intercept, and if necessary destroy hostile aircraft approaching or within U.S. airspace (Air Force Mission)
Maritime Defense	Detect, intercept, and if necessary destroy hostile vessels approaching the U.S. by sea or in U.S. waters. (Navy mission)
Land Defense	Defend U.S. borders and defeat attacks by hostile land forces (Army mission)

⁹⁷. Department of Defense, Quadrennial Roles and Missions Report (henceforth QRM Report), January 2009, 5.

The Army has some dedicated personnel and units that participate in the space and missile defense (S&MD) programs under the U.S. Space Command. This is not a large operation at this time, but the size of the force dedicated to it may increase or decrease depending on the future of the Ballistic Missile Defense Program.

The Army has the responsibility to conduct land operations to defend the U.S. While there is little likelihood of a land invasion, there is a possibility that the Army will be called on to secure the U.S. borders and/or repel a cross-border raid or incursion. Terrorists may attempt to launch a missile or rocket attack on the U.S. from a nearby country, and this would require Northern Command or Special Operations Command to conduct a raid or strike to prevent such an attack or destroy hostile forces after an attack. Land defense operations may be conducted by SOF or GPF. Land defense needs can be met by existing SOF or Army GPF forces. Capabilities needed for Homeland Defense Operations will be addressed in Chapter 10.

3. Move Counterdrug Activities to Domestic Civil Support Operations and Title It Domestic Counterdrug Operations

Although DOD is charged by law with interdiction of drugs entering the United States, the Department of Justice (DOJ) is in overall charge of Counterdrug Operations and DOD is really acting in support of DOJ.

4. Move Foreign Humanitarian Assistance to Peacetime Engagement Operations

Humanitarian Assistance is usually provided in a non-combat situation and does not constitute a limited intervention operation.

5. Move Consequence Management to Peacetime Engagement Operations and Title It Foreign Consequence Management Operations

Foreign Consequence Management is similar to Humanitarian Assistance and is usually conducted in a non-conflict situation. It is not a limited intervention operation.

6. Move Peace Enforcement to Limited Intervention Operations

Despite the name, Peace Enforcement is defined as the use or threat of force to impose peace and as such is more like a limited intervention than a Peace Operation.

7. Rename Irregular Warfare Operations as Stability Operations

Use of the term “Irregular Warfare Operations” as a column head in Table 18 conflicts with the use of that term as an additional warfighting function (see below). This led to a situation in which the term “irregular warfare” was used both for a set of functions and a set of operations. Due to the resulting confusion, there was a need to change one of the names. At this point, it was discovered that there was another extensive

set of IW-like operations already ensconced in a broad term called Stability Operations, and that these operations covered all or almost all of the operations that had been included under Irregular Warfare Operations. It was decided to use Stability Operations as the umbrella term for these kinds of operations. This approach permits the study to address the kinds of capabilities needed for them— regardless of what they are called.

8. Change the Order of Presentation of the Major Operational Categories

Change the order of the major operational categories to show a generally ascending level of violence from left to right in the Spectrum. The result of these changes is the Modified Spectrum of Operations shown in Table 21. The shaded boxes show the changes that were made.

Table 21. Modified Spectrum of Operations (IDA Model)

Peacetime Engagement Operations	Peace Operations	Domestic Civil Support Operations	Homeland Defense Operations	Limited Intervention Operations	Stability Operations	Major Combat Operations
Training Events and Exercises	Peace keeping	Disasters & Declared Emergencies	Missile Defense	Noncombatant Evacuation	Counterinsurgency	Offensive Operations
Security Assistance	Peace building	Public Health & Civil Order	Cyber Defense	Strike	Support to insurgency	Defensive Operations
Exchange Training	Peace making	Special Events	Aerospace Defense	Raid	Foreign Internal Defense	
Recovery Operations	Conflict Prevention	Periodic Planned Support	Maritime Defense	Show of Force	Unconventional Warfare	
Arms Control		Domestic Counterdrug Operations	Land Defense	Sanction Enforcement	Low-Intensity Conflict	
Foreign Humanitarian Assistance				Elimination of WMD	Counterterrorism	
Foreign Consequence Management				Peace Enforcement	Antiterrorism	
					Civil-Military Opportunities	

D. Observations

This section addresses the Modified Spectrum of Operations as a whole and makes some observations that will help determine the capabilities necessary to conduct them.

1. The Degree of Combat

Another way to categorize the various kinds of operations identified above is shown in Table 22. The operations have been grouped into four categories according to the degree of engaging in combat. The Non-Combat Operations in the left-hand column of Table 22 do not involve combat per se. The Threat of Combat column includes operations for which combat is not anticipated but may be required to defend U.S. or Allied forces. The Contingent Combat column lists operations in which U.S. forces will initiate combat if conditions and enemy actions require that be done. For example, an attack or threat of attack on our homeland would necessitate attacking enemy missiles or ships. The Purposeful Combat operations in the right-hand column are those in which combat is inherent. All of the Domestic Civil Support Operations are categorized as non-combat but may involve civil disorders.

Table 22. Military Operations by Degree of Combat

Non-Combat	Threat of Combat	Contingent Combat	Purposeful Combat
Peacekeeping	Support to Insurgency	Foreign Internal Defense	MCO Offensive Operations
Peace building	Unconventional Warfare	Peace Enforcement	MCO Defensive Operations
Peacemaking	Foreign Humanitarian Assistance	Noncombatant Evacuation	Counterinsurgency
Conflict Prevention	Foreign Consequence Management	Recovery Operations	Counter-Terrorism
Training Events and Exercises	Sanction Enforcement	Anti-Terrorism	Strike
Security Assistance	Show of Force	Missile Defense	Raid
Exchange Training	Civil Military Operations	Aerospace Defense	Elimination of WMD
Arms Control		Maritime Defense	Domestic Counterdrug Activities
All Domestic Civil Support	Cyber Defense	Land Defense	Low Intensity Conflict

2. The Spectrum and Methods

Another view of the Spectrum of Operations is in Figure 12, which orders the Major Operational Categories by the extent to which they rely on different methods to accomplish their mission. The three methods used are persuasion, coercion, and force. Persuasion relies on cooperation, co-option, collaboration, and compromise to induce others to work with us, remain neutral, or cease hostile acts and preparations. Coercion is the use of threats of violence and/or political and economic pressure to affect the

behavior of others so they are deterred from acts of war or preparations for war. Force is the deliberate use of violence to affect the behavior of others and accomplish missions. Figure 12 shows how the seven categories of operations relate when ordered by the content of these three methods. The percentages are at this point estimates only and require validation.

The progression from entirely persuasive operations on the left of the chart to almost entirely forceful operations on the right is clear. Since all of these operations can occur simultaneously, the Army must be proficient in all three methods.

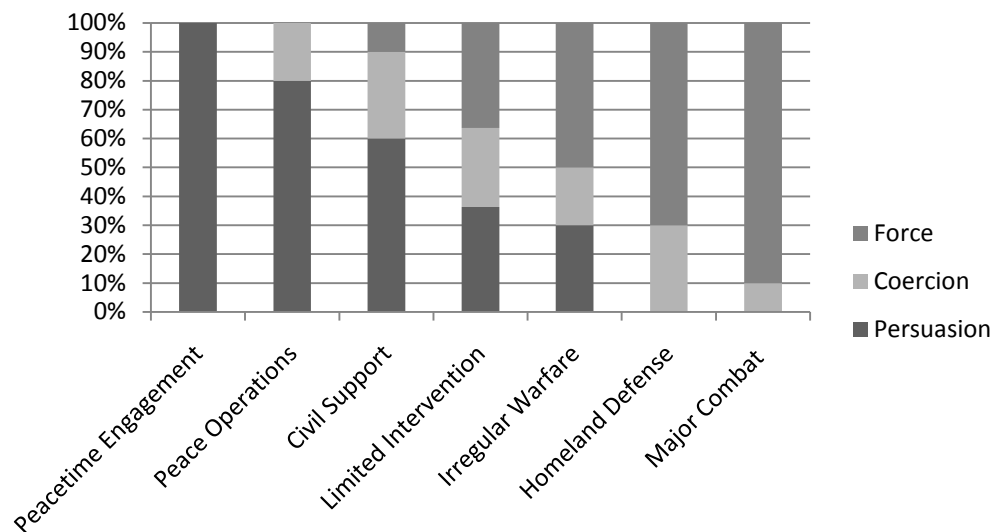


Figure 12. Categories of Operations by Method

3. Applications for the Modified Spectrum of Operations

The Modified Spectrum of Operations provides a basis for sorting, integrating, emphasizing, and discarding some of the many terms and concepts that have been established over the years. If adopted as a DOD standard, it will facilitate planning and programming. One initial application of the Modified Spectrum of Operations is to consider the nature of IW and how that relates to the conduct of MCOs, CMOs, and LIOs. These topics are addressed in the next three chapters of this section.

5. Understanding Irregular Warfare

A. Introduction

This chapter examines, compares, and contrasts the several terms and associated communities of interests that are all part of IW, which is very difficult to define. Some mean it to be whatever is not “Regular Warfare” or Conventional Warfare. Conventional Warfare has not been defined officially either, although it has also been described in various ways. It is worth noting that during the Cold War, the term “Conventional Warfare” was used to identify non-nuclear warfare. It is also important to note that IW and Regular or Conventional Warfare, no matter how defined, are not mutually exclusive, and that operations are not instantly converted from one kind of warfare to the other. Indeed, it appears that elements of several forms of warfare have existed in almost all wars and campaigns while differing in application, amount, and kind.

The Army needs to be able to conduct many different kinds of operations that have been identified as necessary now and in the near future. The Navy, Air Force, and Marine Corps will also be conducting these kinds of operations, but often in different ways. This chapter identifies and elaborates on the IW capabilities needed to conduct these operations. Chapter 6 will address how to provide these capabilities.

As noted in Chapter 4, the convention in this study is that the term Stability Operations is used to denote a major operational category in the Spectrum of Operations. The term “Irregular Warfare,” or “IW,” is used to denote a set of related capabilities for conducting the entire Spectrum of Operations.

B. Comparing Irregular Warfare Capabilities

IW is an umbrella term that covers many different schools of thought and communities of interest. It covers a wide range of functions and appears to defy simplification. Some of the work done in this area is summarized below as a means of illustrating the difficulty of the field.

1. Relationships among Kinds of Irregular Warfare

A recent IDA study compared four kinds of IW using the following definitions established by the Joint Staff:⁹⁸

- Counterinsurgency (COIN) – consists of “those military, paramilitary, political, economic, psychological, and civic actions taken by a government to defeat insurgency.”
- Foreign Internal Defense (FID) – consists of “participation by civilian and military agencies of a government in any of the action programs taken by another government or other designated organization to free and protect its society from subversion, lawlessness, and insurgency.”
- Counterterrorism (CT) – consists of “operations that include the offensive measures taken to prevent, deter, preempt, and respond to terrorism.”
- Stability Operations (SO) – is “an overarching term encompassing various military missions, tasks, and activities, conducted outside the United States...to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure reconstruction, and humanitarian relief.”

The study found that “the definitions are confusing because each definition relates to selected aspects of the overall environment for IW, and the references are different for each term.” In order to clarify the situation, the study compiled Table 23, which compares these four kinds of IW in terms of five general factors.

⁹⁸. Shea, J. R., “Force Implications of Steady-State Foreign Internal Defense and Counterinsurgency (U),” IDA Paper D-4279, November 2007, (SECRET) 57-59, taken from Joint Publication 1.02, Definitions of Military Terms.

Table 23. Comparison of Four Kinds of Irregular Warfare

Factor	Foreign Internal Defense	Counterinsurgency	Counterterrorism	Stability Operations
Host Nation Relationship	Supporting	Supporting	Supporting or Not-Supporting	Supporting or Not-Supporting
Threats	Lawlessness, Subversion, Insurgency	Insurgency	Lawlessness, Subversion, Insurgency	Lawlessness, Subversion, Insurgency
Threat Tactics	Non-Violent Political Action, Military Operations, Terrorism	Non-Violent Political Action, Military Operations, Terrorism	Terrorism	Non-Violent Political Action, Military Operations, Terrorism
U.S. Strategy	Improve HNG* Operations, Counterinsurgent Activity	Improve HNG Operations, Counterinsurgent Activity	Counterinsurgent Activity	Improve HNG Operations, Counterinsurgent Activity
U.S. Means	Diplomatic, Information, Military, Economic	Diplomatic, Information, Military, Economic	Military	Diplomatic, Information, Military, Economic

*HNG – Host Nation Government

The similarity of the contents of Table 23 demonstrates that current terms used to describe kinds of warfare are overlapping and do not provide a sound basis for determining capabilities or designing a force structure. This analysis was based on inputs from the Combatant Commanders and provides a useful view of the current state of IW doctrine and practice. Each Combatant Command defines and does things somewhat differently, and so do the Services. The main part of the study addresses training and advising foreign military forces, which is a major element of IWO no matter how defined. The study found that these functions are usually accomplished through ad hoc arrangements that are started after the need for such training and advising is recognized during an ongoing operation.

2. Relationship between Irregular Warfare and Conventional Warfare

Much of the current discussion among defense intellectuals compares and contrasts IW with its postulated logical opposite, Conventional Warfare or Regular Warfare (RW). One very useful example of this approach is provided by a recent IDA study that identified basic differences between IW and RW, as shown in Table 24.⁹⁹

⁹⁹. Hurley, William J., Joel B. Resnick, and Alex Wahlman, “Improving Capabilities for Irregular Warfare, Volume I: Framework and Applications,” IDA Paper P-4267, August 2007, II-2. Emphasis in original.

Table 24. Distinguishing Attributes of Irregular and Regular Warfare

Irregular Warfare	Regular Warfare
Central role of human terrain	Central role of physical terrain
Extraordinarily tight coupling of civilian and military organizations and activities	Dominance of military organizations and actions
Military actions emphasize small units operating among the civilian populace	Military actions emphasize large units operating in the absence of civilians
Consolidation of security, stability, and reconstruction in area	Defeat enemy in area and move on
Transition control to host nation government	Decisive victory over enemy forces

The study makes the following major points with respect to IW:

- The center of gravity of IW is the attitude of the host nation population, which will determine success or failure.
- Personal interactions during small unit operations influence the people and can be positive or negative depending on the way they are conducted.
- Specialized skill sets not commonly found in military units or government agencies are often available from non-governmental organizations (NGO), international organizations, and contractors.
- Tactical operations in IW often resemble police work more than traditional combat.
- The ultimate goal of IW is to transition responsibility and authority to the HNG, and this requires training, advising, equipping, supporting, and monitoring the development of HNG security and military capabilities.

C. Comparing Stability Operations (SO) and Major Combat Operations (MCO)

Much discussion of IW centers on the differences and similarities between SOs and MCOs. The former is sometimes called “counterinsurgency;” the latter is often called “conventional warfare.” Table 25 through Table 27 provide first a qualitative comparison and then a discussion of the Army unit types needed for these two operational categories.

1. Qualitative Comparison of SOs and MCOs

Table 25 compares the two kinds of operations with respect to Primary, Combat, and Irregular Warfare factors. Primary factors define the difference between SOs and MCOs taken separately. Combat factors govern the tactical postures and maneuvers in a close fight. IW factors affect the conduct of the insurgency part of a campaign. Recognizing differences between the operations helps determine how to perform them simultaneously.

Table 25. Qualitative Comparison of SOs and MCOs by Factors

Factor	Stability Operations	Major Combat Operations
Primary Factors		
Center of Gravity	Host nation people and government	Enemy forces
Key Factor	Human terrain	Physical terrain
Essence	Civil-Military Operations	Military Operations
Tactical Level	Small units operating independently	BCTs in large formations
Mission	Stable and secure host nation	Defeat of enemy military forces
Tactical Pattern	Long-term area-based presence	Seize and hold terrain and move on
Time Frame	Sustained operation over several years	A few months or a year (hopefully)
HN Population	Maximize support of military operations	Minimize effect on military operations
Combat Operations Factors		
Maneuver Units	Dispersed operations among the people	Massed operations against enemy forces
Civil Affairs	Area support by Theater CA Command	Tactical support by Unit CMO Staff
Intelligence	Human intelligence for small units	Sensor intelligence for BCTs
Fire Support	Limited precision fires at key targets	Massed fires for support of maneuver
Force Protection	Base , patrol, and convoy security	Flank and rear area security
Fire Discipline	Avoid collateral casualties and damage	Accept collateral damage
Engineer Support	Construction, rehabilitation, field fortifications	Mobility and Counter-mobility
Explosive Ordinance Disposal (EOD)	Disarm IEDs	Disarm misfires & enemy duds
Military Police	Area security and policing	Battlefield circulation
PSYOP	Target local population	Target enemy forces
Irregular Warfare Factors		
HN Forces	Key to ultimate success	Auxiliaries for less demanding missions
HN Training	Major theater effort	None
Language Skills	Communicate w/population & allies	Listen to enemy traffic
Macro Terrain	Urban	Open (bypass cities if possible)
Enemy Forces	Persuade to change sides	Destroy and break will to resist
Game Plan	Soft power	Kinetic force
Technology	Civil applications	Strictly military
NGOs	Good relationships and mutual aid	Limited
U.S. Agencies	Close relationships and integrated efforts	Limited
Coalition Forces	Integrated operations	Assigned sectors for operations
Detention Ops	Insurgents	Enemy prisoners of war
Knowledge of HN	Key ingredient for success	Familiarization for troops

2. Comparison of Army Unit Types for SOs and MCOs

Table 26 and Table 27 compare SOs and MCOs by Army unit types or branches. Table 26 covers Combat and Combat Support (enablers). Table 27 covers Combat Service Support and Personnel Service Support. Unit types that differ substantially between the two operational categories are shaded. There is a significant difference between tactical employment of BCTs for SOs and MCOs. Several support unit types differ between SOs and MCOs, and several perform essentially similar tasks for both. These tables provide a basis for determining the mix of units within an Army force structure optimized for simultaneous conduct of SOs and MCOs. The term “skill set” refers to the tasks that the troops can perform, along with the necessary equipment.

Table 26. Comparison of SOs and MCOs by Unit Types: Combat and Combat Support (CS)

Unit Type	Stability Operations	Major Combat Operations	Remarks
Combat			
HBCT	Convoy protection and urban clearing	Offensive Operations & Armor engagements	Different tactical postures and formations; many compatible skill sets
SBCT	Patrolling and reacting to incursions	Mobility and speed for offense and defense	
IBCT	Foot patrols and force presence	Blocking positions; area defense; occupying terrain	
Combat Support			
Field Artillery	Local fires from bases, accurate fires on single targets	DS to BCTs, massed & counter-battery fires	Compatible skill sets; different posture
Air Defense	Limited threat	Theater missile defense	Compatible skill sets
RSTA	Operational mid-term	Tactical short-term	Compatible skill sets
Aviation	Operational mobility	Tactical mobility	Flexible employment
Military Intelligence	Local human intelligence; cultural and political factors	Tactical intelligence; enemy forces	Different skill sets
Civil Affairs	Area support based on local jurisdictions	Tactical support to BCTs and other organizations	Different skill sets and postures
Psychological Operations	Target local population	Target enemy forces	Compatible skill sets
Engineer	Construction, Force protection	Mobility/Countermobility	Different equipment; compatible skill sets
CBRN	Defense against CBRN	Defense against CBRN	Compatible skill sets
Military Police	Force protection	Battlefield circulation	Compatible skill sets
Signal	Area networks	Command networks	Compatible skill sets

Table 27. Comparison of CMO and MCOs by Unit Types: Combat Service Support (CSS) and Personnel Service Support

Unit Type	Stability Operations	Major Combat Operations	Remarks
Combat Service Support			
Transportation	Focus on fixed bases	Movement of BCTs	Compatible skill sets
Supply & Services	Provided from fixed bases	Forward support	Compatible skill sets
Maintenance	Evacuate to support bases	Forward support	Compatible skill sets
Mortuary Services	Operate from fixed locations	DS to BCTs and support units	Compatible skill sets
MP EPW	Detain suspected combatants	Collect and detain EPW	Different skills and rules
Ammunition Supply	Reduced workload	Heavy workload to support field artillery	Compatible skill sets
Explosive Ordnance Demolition	Disarm IEDs and similar devices	Disarm enemy duds	Compatible skill sets
Heavy Equipment Transporters	Move armored vehicles to new bases	Move armored vehicles to assembly areas	HETS needed for both; more for CW
Intra-theater airlift	Critical for personnel and urgent supplies	Critical for personnel and urgent supplies	Compatible skill sets
Contracting	Local projects	Supply chain support	Different focus; compatible skill sets
Personnel Service Support			
Personnel Mgt	Administer Army personnel	Administer Army personnel	Compatible skill sets
Public Affairs	Build public support in theater	Build public support in USA	Different focus
Finance	Funds for troops and local labor and service contracts	Funds for troops and local labor and service contracts	Compatible skill sets
Chaplains	Religious services and troop counseling	Religious services and troop counseling	Compatible skill sets
Judge Advocate General (JAG)	Contracting and local criminal matters	Military justice	Change in scope to do both functions

This section has presented information that addresses the capabilities needed for the Spectrum of Operations and related them to the kinds of units (unit types) that are designed to have these capabilities within the Army force structure. This process establishes a basis for examining the mix of unit types that will deliver the right kinds of capabilities (qualitative) and have the necessary capacities (quantitative) to be able to conduct the entire Spectrum of Operations.

D. The Essential Unity of Military Operations

Although the various military operations have been arrayed in a Spectrum for analytical purposes, they are not separate and distinct or mutually exclusive. On the contrary, they may occur in close proximity in time and place. This has been true in the past and will be true in the future. Increasingly, students of war and warfare contend that several kinds of operations converge in time and space and complicate attempts to simplify the subject. With minor variations, all of the basic operations types have more in common than is apparent at first glance. The three examples below are representative of the commentary.

1. Army Doctrine

The Army believes that many of the operations identified in the Spectrum may occur at the same time in different places or even in the same place.¹⁰⁰ The Army's approach is that the various components of the Spectrum are not discrete and mutually exclusive but instead overlap and interact. Thus, it is likely (and has been shown to be true in the past) that a campaign will have to conduct some of each kind of operation, fighting a conventional battle in some places while waging IW in other places, and deterring and influencing other actors in yet other places. At the strategic level, there will be several different kinds of campaigns being conducted simultaneously, but with different degrees of emphasis and scope. At the operational level, different kinds of tactical operations are occurring simultaneously but in varying degrees and levels of importance. At the tactical level also, Army troops will often be engaged at the same time and even at the same place in two or more different kinds of operations. So it is quite likely that many of the same capabilities will be needed across the entire Spectrum of Operations but in different amounts and with different emphases.

2. The Three-Block War

The simultaneous conduct at the tactical level of three kinds of warfare at the same time and same place has been termed "The Three-Block War." The Spectrum of Operations is essentially horizontal and ranges from least violent to most violent. A vertical Spectrum also applies to troops that will have to conduct several different kinds of operations in rapid succession or even at the same time. The vertical Spectrum is characterized by Lieutenant General James M. Dubik as follows:

Army units need to be ready to fight in a relatively conventional way in some situations, to facilitate local political accommodation in others, and to assist in either humanitarian aid delivery or economic development in still others. This sense of full spectrum reminds us that the same unit could

¹⁰⁰. FM 3-0, Chapter 2, *passim*.

be doing each of these kinds of operations on the same day and that the mix of these operations changes rapidly. It's the old 'three-block war' model. On the ground, there are often no phases in the traditional sense. Units often conduct tasks associated with conventional combat, humanitarian assistance and nation-building—all at the *same time or in quick sequence*.¹⁰¹

General Dubik goes on to the heart of the matter. He points out that:

The debate that I am hearing—either we should focus on conventional warfighting, or we should focus on the current fight—is wrongly cast. The strategic environment our Army faces is the world of *and*, not of *either/or*.¹⁰²

3. Hybrid Warfare

Hybrid Warfare is a relatively new term that envisions the conduct of multiple modes of combat simultaneously at the operational and tactical levels.¹⁰³ Some of the major features of hybrid warfare are as follows:

Tomorrow's conflicts will not be easily categorized into conventional or irregular. The emerging character of conflict is more complicated than that. A binary choice of big and conventional versus small or irregular is too simplistic.¹⁰⁴

In hybrid warfare, "forces become blurred into the same force or are applied in the same battle space. The combination of irregular and conventional force capabilities, either operationally or tactically integrated, is quite challenging."¹⁰⁵

The term "hybrid warfare" may be new, but simultaneous conduct of conventional, irregular, and counterterrorist warfare is not. Military history shows that it has been in fact a standard feature of wars from ancient times to now. What is new is that this blending of tactics and technology has become a favored way of waging war for both states and non-state actors, and that the United States must recognize and prepare for it.

4. Complex Operations

Yet another concept that has emerged is called "Complex Operations." This can be considered to be a statement of the obvious, but it has the virtue of making the point that there needs to be a way to manage complexity. The intent of this usage reinforces the

¹⁰¹. Dubik, LTG James M., Ret, "The Two Senses of 'Full Spectrum,'" *Army Magazine*, November 2008, 18-19.

¹⁰². *Ibid.*, 18.

¹⁰³. Hoffman, Frank G., "Hybrid Warfare and Challenges," *Joint Forces Quarterly*, Issue 52, 1st Quarter 2009, 34-39.

¹⁰⁴. *Ibid.*, 39.

¹⁰⁵. *Ibid.*, 36.

idea that the differences among the operations and the various concepts are less important than the similarities, and the solutions are not either-or but instead are how much of each is needed and how they can best be combined to achieve overall success.

E. Observations

This completes the survey of the various forms of warfare and the various kinds of military operations. The formulation developed in this study is not the best or ultimate solution. There are many more variations and additional definitions that could have been considered. The study does illustrate the need for a major effort to synthesize all of these and other ideas into a single, standard lexicon to be used by all elements of DOD. In the meantime, this formulation provides an acceptable, interim basis to address the capabilities the Army needs to conduct the Modified Spectrum of Operations.

It appears that most of the IW capabilities and other capabilities (whatever they may be called) are necessary most of the time in proper proportions. This being the case, it is perplexing to discover that there are numerous programs that purport to provide IW capabilities.

This chapter has revealed but not resolved the chaos that pervades the field of IW and exposed the wealth of commentary and the numerous variations in terminology. It has not been possible to offer a simple, short, and definitive solution that will be accepted by all. It has been possible, however, to demonstrate that focusing on the functions and tasks to be done provides a way to design units and forces for the full Spectrum of Operations, no matter what the components are called. The next chapter proposes a way to simplify the presentation and provision of IW capabilities.

6. Providing Irregular Warfare Capabilities

A. Introduction

This chapter considers how the Army can provide Irregular Warfare (IW) capabilities for Full-Spectrum Operations in a well-organized and doctrinally coherent manner over the long-term with minimal forced improvisation. For over seven years, the Army has engaged in campaigns in Afghanistan and Iraq that have been described by many similar but somewhat different terms and carried out by similar but somewhat different tactics and doctrines. The conduct of these campaigns has been notable for the extent to which the Army has been able to improvise to create new organizations and modify old ones in order to adapt to the changing needs of the Combatant Commanders. This ad hoc approach was necessary because the Army did not have on hand enough of the kinds of units and trained soldiers the Combatant Commanders needed for these campaigns. As a result, Commanders found it necessary to task-organize many Army units and form provisional units to provide IW capabilities. The necessity for adapting to the circumstances in each theater is inherently inefficient and less effective than having on hand sufficient units and personnel to provide IW capabilities. As indicated in Chapter 5, it is apparent that while there is no single community of interests that contemplates all of the needs of IW, they all tend to cover the same capabilities. However, the same discussion made it possible to synthesize the parts into eight major IW capabilities that the IDA study team believes cover the entire field of endeavor.

This chapter presents the eight basic IW capabilities and suggests how the Army can provide them for Full-Spectrum Operations overseas. The IW capabilities are:

- Knowing the area of operations,
- Forming foreign military and police forces,
- Securing the people,
- Winning popular support,
- Improving the economy,
- Improving governance,
- Collaborating with others, and
- Understanding the IW concept.

The following section describes the IW capabilities. The section after that illustrates their relationships to the five foreign operations types in the IDA Modified Operational Spectrum developed in Chapter 4, integrates them with the Army's warfighting functions, and considers how to provide them in an organized manner when needed.

B. Irregular Warfare Capabilities

1. Knowing the Area of Operations

While the level and depth of knowledge may differ, knowledge of the area of operations is important for all military operations. This knowledge is needed for each of the categories in the Spectrum of Operations.

There are four elements of this knowledge: History, Geography, Culture, and Language. The history of the country or region is a necessary backdrop for understanding its current circumstances. Geography provides insights from the perspective of spatial relations and provides an understanding of the topography, climate, drainage, occupancy, and infrastructure of a country or region comprising numerous countries. Knowledge of culture provides an understanding of the actions and attitudes of the people, including their religions, customs, and aspirations. Together, history, geography, and culture help explain the economics, governance, and societal norms that characterize a region, country, or smaller area of operations. Knowledge of the language prevalent in the area of operations is a prerequisite for gaining a thorough understanding of and dealing effectively with the people of the area.

Area knowledge also provides a basis for gaining and using intelligence, which is processed knowledge focused on accomplishing a mission. There are different levels of emphasis on area knowledge and how it is applied in the major operational categories. Peacetime Engagement Operations emphasize knowledge of the governments in the area. LIOs emphasize detailed knowledge of the relatively small areas in which these operations occur. SOs emphasize knowledge of the local people. MCOs emphasize knowledge of enemy forces and key terrain.

2. Forming Foreign Military and Police Forces

In both SOs and MCOs it is often necessary to help the host nation improve or develop its own military and police forces. This task falls to DOD and is accomplished by each Service in its own domain. The Army has performed this mission as a part of a conventional war, as it did in the Korean War, and as part of a counterinsurgency war, as it did in the Vietnam War. It has done so in connection with peace operations, as it did in the Balkans. The Army needs to have a standing capability in this area in order to engage successfully in IWO. There are four tasks to this mission: organizing, equipping, training, and advising. These tasks overlap and occur simultaneously and provide an orderly way of discussing this capability. Key to the role of development of police forces today is that the Departments of Justice and State have overall responsibility and the Department of Defense is in a support role.

Organizing. It is necessary to establish an organizational framework for forming foreign military forces. It involves, among other things, forming a ministry of defense and a military staff with appropriate subordinate offices, agencies, and facilities. Ideally, this capability would be provided before forming troop units, but the urgent nature of military operations often means that the top-level management structure and troop units are being formed at the same time. This may be a problem because acquisition of equipment, supplies, and troops to form units requires prior planning, programming, and procurement.

Equipping. Equipping the foreign force is a prerequisite for forming effective units. At the highest level, this work is done by the Defense Security Cooperation Agency (DSCA) on a continuous basis. For urgent actions, this function becomes a matter for the Defense Logistics Agency and the materiel commands of the Services.

Training. Training military members involves simultaneous execution of several programs. Officers need to be trained in their duties to lead units and also in the larger role of planning, preparing, and conducting operations. In the long term, graduates of a new military academy will provide the necessary leaders/managers. In the short term, it is necessary to utilize former officers of the old regime and/or create new junior officers through officer training schools. The same process is needed to create an NCO corps, which, in our system, is a key element of small unit operations. After the leadership structure is in place, the next step is to obtain and train the enlisted personnel to fill out the units to their authorized strengths. This system has been used by the U.S. Army for years and it works well. The training teams must have an adequate level of regional knowledge and language proficiency, and they also need to know how to instruct and assist the students.

Advising. Advising the foreign force is an extension of training and a shift from training individuals to mentoring unit leaders and commanders as they perform their own training and conduct their own operations. This is a sensitive task and those involved need to know how to persuade their counterparts to do the right thing.

3. Securing the People

To prevail in an IW operation, it is necessary to provide security for the people in the area of operations. In a broad sense, security includes not only physical security but also assuring the well-being of the people. There are four aspects to security: defense against attacks, policing against crime, subsistence support, and medical care. The goal is to provide security at a level that provides an adequate life style and fosters hope for a better future.

Defending. Preventing attacks by enemy forces, insurgents, or terrorists is the first level of security that has to be provided. This is the aspect of IW that receives most of the Army's attention; it is a necessary, though not sufficient, task.

Policing. It is also necessary to prevent crime and bring criminals to justice. A lack of security leads to increases in crime and corruption. This task focuses on providing a sense of stability and a belief that order will be maintained in daily life.

Subsistence Support. Security includes provision of food, water, sundries, and basic services to the people. Without these supplies and services, physical security does not provide the basis for quelling an insurgency. Initially, some supplies may be distributed by the Army, but at some point it is necessary to transition to a situation in which the host nation government and ultimately the people can support themselves.

Medical Care. Medical care is another factor in providing security for the people. Military medical units and NGO medical teams can bring treatment, preventive medicine, and sanitation to halt the spread of communicable diseases and to repair the damage done by combat operations. As with subsistence support, this work should ultimately be turned over to the host nation government.

4. Winning Popular Support

Even if people are secure, they may not accept our advice or support us, or the host government, particularly if the insurgency is based on ideological, cultural, or religious grounds. Gratitude is not a basis for working together. We must still win the support of the people and the key leaders of the places in which we are engaged. We need the capability to establish a communications strategy and the means to deliver it. This strategy has to counter the enemy's propaganda, and replace it with our own message.

Communicate Our Message. We need to be able to formulate a message and sell it to the people and officials of the host nation. Providing a positive message that is consistent and truthful is the best way to make our case.

Counter Enemy Propaganda. The enemy will have a very strong capability to put forth its message and does not have to tell the truth to do so. They will say whatever advances their cause. Our side needs to be able to disprove enemy lies and distortions and to do so quickly and effectively.

Avoid Making Enemies. When we conduct our operations and pursue our objectives, we need to take care to avoid antagonizing the people and the officials of the host nation. This will not be easy, since it will often require accepting more risk than we like in order to minimize collateral damage and avoid adverse reactions.

Make Friends. It is not enough to merely avoid making enemies; it is also necessary to have a positive program to make friends. This can be accomplished through

a comprehensive program based on cultural knowledge and the innate good will of soldiers.

5. Improving the Economy

In the long term, one of the goals of IW is to help the local populace develop and operate their own economy. There are five major parts to this capability: Finance, Infrastructure, Commerce, Technology, and Environment.

Finance. The circulatory system of an economy is the financial sector that makes money and credit available for the economy and allows modern methods of financial management to take place. Ministries and banks of the host nation need to be in place and running properly if an economy is to be revived and expanded.

Infrastructure. An economy depends on 10 basic infrastructure systems: food, water, energy, communications, health care, housing, transportation, manufacturing, trade, and land and natural resource management. These systems are mutually interdependent and need to be expanded more or less at the same time.

Commerce. Selling and buying is at the heart of an economy, and taking steps to restore commerce and trade in whatever fashion is suitable to the area of operations is necessary.

Technology. Improving an economy can be helped along by taking advantage of modern technology, such as cell phones that skip over older technologies. This makes it possible to do more at lower cost.

Environment. It is also necessary to do things in ways that do the least amount of harm to the environment. The area of operations is likely to be in poor condition, and it makes sense to adhere to international standards for environmental conservation to the greatest extent possible.

6. Improving Governance

Another capability is being able to foster the establishment of an effective government for the area of operations. The ultimate goal of IW is to restore to the people of the host nation a government that will rule on their behalf. In effect, all of the effort is meant, in one way or another, to achieve good governance. This involves representation, laws, law enforcement, courts, honesty, and competence.

Representation. A government that works for the public good is based on some format that allows the wishes of the people to be represented in deciding what is to be done. This could mean, for example, providing support for tribal councils, holding elections, or assisting in providing another method of consultation that provides input to

the rest of the governance system. The *form* of representation is less important than its existence and implementation.

Laws. Good governance requires laws, and it is necessary to understand existing laws to provide advice on how to improve them. This may include helping to write a constitution or providing a legal framework that is suited to the culture and traditions of the host nation.

Law Enforcement. Laws have to be enforced, and it is necessary to establish a law enforcement system that will deter, detect, investigate, and solve crimes and then turn the suspects over to the courts for trial.

Courts. An impartial judicial system of courts to hear cases and appeals and dispense justice is required for good governance. There must be a capability to create or revive such a system in the host country.

Honesty. The hallmark of a government that can overcome an insurgency is honesty. Those intent on helping the host nation must be able to convince the officials of that nation that honesty works and that corruption in any of its variations plays into the hands of the insurgents. Moreover, adhering to the rule of law and eliminating corruption are necessary to have a robust economy.

Competence. In addition to honesty, the officials and the entire governmental system must be competent. This means they have to be trained in their duties and educated in their fields.

7. Collaborating with Others

One of the prerequisites for the conduct of all military operations is finding ways to bring to bear not only the resources of DOD and the Army, but also the resources and expertise of many other organizations. DOD and the Army will have to work with other federal departments and agencies, coalition partners, international organizations, and NGOs. Regional Combatant Commanders already work with other organizations to some extent, but in MCOs this aspect of Full-Spectrum Operations is relegated to a minor role. The Army already works well with other military organizations—allies, coalition partners, and host nation forces.

For SOs, it is essential to have a capability to collaborate with all of these organizations. The key is to find a way to do so. Army forces must also work well with host nation governments, international organizations, and NGOs, particularly in the area of operations. For this to happen, there needs to be a mechanism or system that fosters policy formulation and program management in partnership with the host nation. In order to have this capability, DOD and the Combatant Commanders are already focused on integrating their operations with those of the other organizations. The Army can devise and provide capabilities to support such collaboration.

8. Understanding the IW Concept

Finally, in order to provide all of the above capabilities, it is necessary that the civilian and military leadership of DOD and the Army understand the IW concept and support it. This is an issue of mindset. Army doctrine sets the tone for the conduct of military operations. The Army's professional education programs instill this doctrine in its leaders, but the Army is only one part of the system. DOD, the entire United States Government, and many foreign and international organizations also have roles to play in modern warfare, so the Army, in a sense, has to ensure that what it is teaching is at least compatible, and hopefully complementary, with what the other organizations are teaching. Given the conflicting ideas that abound, the Army should at least produce leaders who can work well with others and integrate various views into acceptable courses of action. While doctrine is the basis for action, it can also be restrictive if the leaders are taught to follow doctrine too strictly and with a narrow focus. Officers and senior executives, therefore, should be taught at the outset of their careers to view widely, dig deeply, and keep an open mind.

This means that it is necessary to provide more time to educate the leaders of the Army. This is contrary to current attempts to reduce the number of officers sent to post-graduate schools and shorten the duration of professional military education courses. Although it is tempting in wartime, when officers are needed in the theaters of operations, to cut costs by reducing the funding of officer education, this is a false economy that has adverse effects in the long run. Joint and service education programs should address all elements of the Spectrum of Operations, as well as the managerial aspects of command duties. Then, when the need arises on the battlefield to conduct a prolonged, three-block, hybrid warfare campaign, none of the elements will be new or strange. In effect, the leadership of the Army will have extended its doctrinal repertoire and influence.

9. Summary of IW Capabilities

IW capabilities are required for all operations. Most of them are already being provided by ongoing programs, and they all contribute to the conduct of the Spectrum of Operations. Table 28 and Table 29 below summarize in general terms the relationships of the IW capabilities to foreign operations.

Table 28 shows how the IW capabilities relate to the five categories of foreign operations with respect to the general number of people needed and their levels of expertise.

Table 28. Relating IW Capabilities to Foreign Operations

	Peacetime Engagement Operations	Peace Operations	Limited Intervention Operations	Stability Operations	Major Combat Operations
Knowing the Area of Operations	A few senior and mid-grade people at a high level of expertise	Few people at a high level; many at a low level		A relatively small number of people at a high level of expertise; many people at a basic level of expertise	Few people at a high level; many at a low level
Forming Foreign Military and Police Forces		n/a			Few
Securing the People					
Winning Popular Support					
Improving the Economy					
Improving Governance		Many			A few people at a high level of expertise
Collaborating with Others	Few				
Understanding the IW Concept	Senior and mid-grade people with good understanding; numerous people with detailed knowledge and experience; many people with basic orientation				

Table 29 shows the differences in emphasis for each IW capability across the Spectrum of Operations.

Table 29. Relationships of IW Capabilities to the Spectrum of Operations

IW Capabilities	Peacetime Engagement Operations	Peace Operations	Limited Intervention Operations	Stability Operations	Major Combat Operations
Knowing the Area of Operations	Broad and General	Political Situation	Local and Detailed	Culture and Governance	Enemy and Terrain
Forming Foreign Military and Police Forces	Continuous Small Scale	n/a	n/a	For Host Nations	For Allies
Securing the People	n/a	Yes	n/a	Essential	n/a
Winning Public Support	Important but Secondary	Yes	n/a for most; Yes for some	Essential	Helpful
Improving the Economy	n/a	n/a	n/a	Important	n/a
Improving Governance	n/a	n/a	n/a	Important	n/a
Collaborating with Others	Yes	Yes	Yes	Essential	With Allies
Understanding the IW Concept	Yes	Yes	Yes	Yes	n/a

C. Capabilities for Foreign Military Operations

This section addresses major capabilities needed to conduct the five categories of foreign military operations discussed in the previous section: Peacetime Engagement, Peace Operations, Limited Intervention, Stability, and Major Combat. Each of these is broken down into the six major warfighting functions prescribed in FM 3-0: Command and Control, Movement and Maneuver, Fires, Intelligence, Protection, and Sustainment.¹⁰⁶ Based on the previous discussion, IW has been added as a seventh warfighting function. The seven functions are described below along with both the statement of the needed (or necessary) capability and Army unit types that provide that capability.

1. Command and Control

Capabilities for command and control are shown in Table 30.

Table 30. Command and Control Capabilities

Capability	Provided by
Receive a mission, make a plan, and prepare to accomplish it	These capabilities are provided by commanders, staffs, and the headquarters and command posts that support them. Headquarters include theater commands, corps, divisions, brigades, and battalions. Theater command headquarters are specialized by function but operate on an area basis. Corps and division headquarters are multifunctional. There are many types of brigade and battalion headquarters. A few are combined arms; others are multi-functional or specialized. These capabilities are also provided by team, detachment, section, platoon, and company commanders.
Maintain near real time knowledge of the situation in the area of operations and the area of interest	
Maintain contact and share information with higher and lateral headquarters and elements	
Integrate intelligence, information, and sustainment factors into the planning process	
Lead and motivate the headquarters, subordinate and supporting elements, and the troops	
Assign missions and tasks to subordinate and supporting elements in accordance with the commander's intent and the adopted course of action	
Monitor and control performance of subordinate and supporting elements and adjust the plan to conform to the situation and accomplish the mission	
Transmit information from nodes to other nodes and into networks	Signal elements in all headquarters, and signal units provide network support on a theater-wide basis
Conduct civil affairs activities	Civil-Military Operations staff sections and attached or supporting Civil Affairs units

¹⁰⁶ FM 3-0, 4-3 to 4-7.

2. Movement and Maneuver Capabilities

It is necessary to be able to move units to the theater and then to the battlefield, where they can maneuver to seize and hold terrain, attrite enemy forces, and break their will to resist. The capabilities for this function are listed in Table 31.

Table 31. Movement and Maneuver Capabilities

Capability	Provided by
Deploy to the theater of operations	Strategic airlift and sealift units
Move to the battlefield	Transportation units
Maneuver on the battlefield to attain and maintain contact with enemy forces	BCTs and other units with organic vehicles, Military Police units
Employ direct fires to attrite the enemy and break his will to resist	BCTs with organic individual and crew-served weapons
Seize and hold terrain features and occupy areas	BCTs with infantry and dismounted troops
Conduct mobility and countermobility operations	Engineer combat units
Employ battlefield obscuration	Chemical smoke generating units

3. Fires Capabilities

Fires are used against enemy targets in order to destroy or damage enemy troops and equipment, disrupt operations, and diminish the enemy's will to resist. Fires capabilities are shown in Table 32.

Table 32. Fires Capabilities

Capability	Provided by
Identify and acquire surface targets	BCTs, BfSBs, fires brigades, and others
Provide indirect fire support	Field artillery cannon and missile battalions
Assess effectiveness of fires	Units requesting fire support
Integrate fire support	Fire support coordination centers at BCTs, fires brigades, and higher headquarters
Synchronize fires with maneuver elements	BCTs, division and corps headquarters
Integrate command and control warfare and the use of nonlethal fires	BCTs and fires brigade headquarters

4. Intelligence Capabilities

It is necessary for military operations to know about the enemy forces, friendly forces, and all aspects of the situation that affect the conduct of the operation and mission accomplishment. The relevant capabilities are shown in Table 33.

Table 33. Intelligence Capabilities

Capability	Provided by
Conduct surveillance and reconnaissance	RSTA battalions of BCTs and BfSBs, aviation units, UAV units
Collect intelligence on the enemy situation	Intelligence sections of BCT, division and corps headquarters, BfSBs, MI battalions, theater and national intelligence assets
Maintain awareness of the friendly situation	
Analyze and integrate information and data	
Disseminate finished intelligence to other elements	

5. Protection Capabilities

Military operations include securing friendly and coalition forces, and the people in the area of operations, from enemy and terrorist attacks. This category also covers capabilities needed to protect the health of the troops. Table 34 shows the Protection Capabilities. Table 35 shows the Health Protection Capabilities.

Table 34. Protection Capabilities

Capability	Provided by
Defend against enemy air and missile attack	Air and Missile Defense units
Recover missing personnel	BCT, brigade, division and corps headquarters
Protect friendly information	All commanders, counterintelligence units
Secure the area of operations	Military Police and security units
Warn and protect against terrorist attacks	Intelligence units and Military Police units
Provide for survivability of troops and equipment	All commanders and headquarters
Protect the health of the troops	All commanders, medical units
Chemical, biological, radiological, and nuclear defense	Chemical units
Provide a safe operational environment	All commanders, safety sections of major headquarters
Provide operational security	All commanders, counterintelligence units
Disarm or neutralize unexploded munitions	Explosive Ordnance Disposal units

Table 35. Force Health Protection Capabilities

Capability	Provided by
Preventive Medicine	Preventive Medicine units
Veterinary Services	Veterinary Corps units
Combat and operational stress control	Behavioral Science units
Preventive Dentistry	Dental units
Laboratory Services	Medical Corps laboratories

6. Sustainment Capabilities

A capability to sustain the forces is essential. This category is divided into three sub-categories: logistics, personnel services, and health services, as shown in Table 36 through Table 38.

Table 36. Logistical Sustainment Capabilities

Capability	Provided by
Maintain vehicles and equipment	Maintenance units
Transport personnel, equipment, and supplies	Unit vehicles, transportation and aviation units
Provide supplies to units	Water supply, petroleum supply, ammunition supply, and general supply units
Distribute equipment and supplies to users	Logistical headquarters, distribution centers
Provide field services to unit personnel	Field Service units
Award and monitor support contracts	Contracting units
Construct and maintain facilities	Engineer construction units
Secure enemy prisoners of war and detainees	Military Police EPW and detainee units

Table 37. Personnel Services Sustainment Capabilities

Capability	Provided by
Human Resource management	Personnel management units
Financial management	Finance units
Legal support	Judge Advocate General units
Religious support	Chaplain teams
Entertainment	Bands
Morale, Welfare, and Recreation support	Theater and functional headquarters

Table 38. Health Service Sustainment Capabilities

Capability	Provided by
Provide urgent medical care for personnel	Medical elements of BCTs and medical units
Provide for evacuation of ill/wounded personnel	Medical evacuation units
Hospitalize ill and wounded personnel	Military hospitals
Provide dental care	Dental units
Logistical support for medical equipment and supplies	Medical Supply units
Laboratory and blood supply support	Medical laboratories and blood units
Behavioral and psychiatric treatment	Behavioral Science units

7. Irregular Warfare Capabilities

Some specific IW capabilities and their providers are shown in Table 39.

Table 39. Irregular Warfare Capabilities

Capability	Provided by
Understanding the Area of Operations: history, geography, culture and language of countries and local populations	Expert knowledge for selected commanders, staffs, and unit members, and familiarization for all
Training foreign military and police forces	SOF, provisional training units from GPF
Securing the People	SOF, GPF, CA units, logistical units
Obtaining support of local groups and factions	SOF and CA units
Conducting counterterrorism strikes and raids	SOF, task forces from GPF
Collaborating with civil agencies on host nation development and reconstruction	CMOCs at theater, corps, and division headquarters, and CA units
Foreign Consequence management	
Conducting civil-military operations	CA units
Improving local infrastructure and commerce	
Supporting improvements to local economies	
Countering enemy propaganda	PSYOP units
Informing and influencing the local populace and enemy elements	Information Operations units
Integrating human factors into tactical operations	Human Terrain Teams
Disseminating information to the public	Public Affairs units

Table 40 shows a first cut at allocating the warfighting functions among the categories of operations. Command is needed for all operations. BCTs are prominent in SOs and MCOs and, perhaps, in some of the larger LIOs. There is a distinct difference in

fires between MCOs and SOs/LIOs. Intelligence is needed for all, but at different levels and perhaps from different sources. Sustainment is needed for all at different levels and with different kinds of application. IW capabilities are very significant for Peace Operations, LIOs, and SOs.

Table 40. Relative Importance of Warfighting Functions Operational Categories

	Peacetime Engagement Operations	Peace Operations	Limited Intervention Operations	Stability Operations	Major Combat Operations
Command	OSD, Theater Hqs	Combined Headquarters	Theater and Tactical Headquarters		
Maneuver	n/a	GPF task forces	SOF/small GPF units	Brigade Combat Teams and SOF	
Fires	n/a	n/a	Few precision fires		Many massed fires
Intelligence	Strategic	Local	Operational and Tactical		
Protection	n/a	Minor	Minor	Major	Minor
Sustainment	Global Logistics	Theater Logistics	Minor	Theater Logistics	
Irregular Warfare	Policy/Programs	Major Emphasis			Minor Emphasis

Note: The amount is indicated as n/a, minor, or major

D. Irregular Warfare Capabilities

This section summarizes the eight IW capabilities proposed in Chapter 6, assigns responsibility for them, and lists Army unit types that provide them.

1. Knowledge of the Area of Operations

Knowledge of the area of operations is a basic prerequisite for conducting all military operations. Joint and Army training and education programs provide this capability. These programs represent substantial efforts to provide this knowledge, but less attention is paid to retaining personnel with this knowledge.

Table 41 shows a possible framework for providing area knowledge capabilities gained from academic study, language training, on-the-ground experience, and utilization in tours that reinforce and extend that knowledge. Relatively few officers and NCOs need to be regional specialists. A significant number of officers and enlisted personnel need to be able to serve as translators for common and military terms. Some enlisted personnel need to be able to listen to and understand enemy communications. A large number of officers and NCOs need to have sufficient regional knowledge to carry out their duties in

IWO. Finally, the rest of the troops in a campaign need to be familiar with the assigned area of operations and able to converse at a basic level in local languages.

Table 41. Applications of Area (Regional) Knowledge

Level of Expertise	Regional Studies	Language Proficiency	Experience	Assignments
Regional Specialist, Officer or Senior NCO	Degree in history, politics geography, and culture	Speak, read, and write fluently in one or more area language	1-2 tours in the region	FAOs, attachés, OSD, joint and combatant command staffs, SOF military groups, exchange tours of school and duty, intelligence units
Good knowledge of a specific theater or area	Service School Training on the region	Speak and read fluently in the language of the area	Repetitive tours in the area	Regional command staffs, corps and division staff elements, BfSBs, Civil Affairs units, PSYOP units, SOF
Translator Line officer or NCO	Orientation and online courses	Fluent in conversation and technical terms	1 tour is desirable	Provincial Reconstruction Team (PRT), Human Terrain Team (HTT), training teams, BCTs, BfSBs, MI battalions, other theater troops, SOF
Intercept NCO	Orientation	Fluent in listening	n/a	SIGINT units
Apprentice Junior Officer and NCO	Orientation	Proficient in speaking and reading	1 tour is desirable	Units oriented to theaters, BCTs, support units
Troop Familiarization	Deployment Briefings	Basic conversation	About to deploy	All GPF

For the Army (and DOD), gaining and applying area knowledge can be organized into the six regions covered by the Regional Combatant Commanders. Connecting regional knowledge to the six Combatant Command theaters makes it possible to tailor educational programs to the needs of each region, provide more utilization tours, and infuse regional knowledge into the planning and conduct of operations within a region. In the past, providing an adequate amount of this kind of capability has generally been hampered by reductions in funds and programs. The foreign area officer program seems to have been limited to support for the defense attaché program, and area specialists have been sequestered in the intelligence community, with little hope of promotion to senior grades. By the time these officers have completed an exchange or attaché tour, they are often forced to retire, suggesting that changes to retirement guidelines should be considered for such specialists.

There is an effective translator program, but no concerted effort to provide a large number of military translators to accompany GPF on their tactical patrols or in dealing with local officials. It is only when an urgent need arises that the Army and DOD seek

people with needed language skills. This is perhaps not the best way, but they somehow have done it. A substantial number of soldiers have been trained to listen to communications in other languages, but there has been little effort to make broader use of these personnel. Soldiers with foreign language skills can rise to a higher level of regional knowledge and can be assigned to positions where they can use their language training to full advantage. Junior officers and NCOs should be offered the opportunity to gain regional knowledge, including language proficiency through distributed learning networks, and be provided with incentives for doing so.

The Intelligence Community funds and manages a significant portion of the DOD budget for language training and country or regional knowledge. Foreign Area Officers (FAO) receive an excellent education, including language training, and are assigned as Defense Attachés or staff officers in combined or joint headquarters. This means that the small number of area experts is almost always operating at the strategic level.

Language fluency is needed for translating or listening, but is also the key to knowledge of the geography, culture, history, and economies of other nations and regions, as well as for making friends in foreign lands. Some linguist units have been formed, but this is of limited value because the real need is for area knowledge that transcends language fluency.

Personnel with regional knowledge need to be available at the operational and tactical levels and should be distributed among all staff functions and commanders. This means that more knowledgeable people are needed in the theater headquarters, intermediate tactical headquarters, and in the BCTs.

Funding for language training and area knowledge should be included in the GPF and SOF programs and budgets, and personnel policies should be revised to retain these people, perhaps beyond normal career lengths.

The regional commands should be assigned the responsibility for achieving and maintaining knowledge of the languages and characteristics of their respective theaters. Special Operations Command (SOCOM) would do the same for its global missions. OSD would provide general oversight and support. The CMOC at each command headquarters could be the program office for establishing theater knowledge requirements and utilizing personnel with the appropriate regional knowledge at each command headquarters.

2. Forming Foreign Military and Police Forces

The capability to form foreign military and police forces differs from the other IW capabilities and is the responsibility of theater commanders supported by Service- and Defense-wide programs.

Although training and advising foreign troops is something the Army has done many times before, it seems in each new instance the Army has forgotten and must learn

how to do it again. Training and advising foreign troops requires people that have a high level of regional and country knowledge, know the language of the troops they are to train, have a good background in military doctrine, tactics, and techniques, and know how to teach foreign troops and advise foreign commanders.

This is not a new mission for the Army. From 1950 to 1956, the Korea Military Advisory Group (KMAG) was a separate organization from U.S. Army forces. Advisory teams were assigned to Republic of Korea Army headquarters, corps, divisions, and smaller units. The result was a very capable South Korean Army. From 1964 to 1972, the Military Assistance Command Vietnam (MACV) was separate from the Field Forces (Corps) that commanded the U.S. Army combat and support units. Officers and NCOs assigned to MACV usually received a short course in how to be an advisor, and some received language training. They were then distributed on an area basis to the provinces and districts of Vietnam and a unit basic to the corps, divisions, and smaller elements in the Army of the Republic of Vietnam (ARVN) and local security forces. From 1965 through 1972, the Army conducted a successful training and advisory program for the ARVN that failed when U.S. support was terminated.

After the end of the Vietnam War, focus was almost entirely on NATO operations, where allied military forces did not need advisors or trainers, and the capability to form foreign forces was degraded. The Army reduced the size of programs that might have rapidly provided a cadre of officers and NCOs to staff new advisory groups and training teams. In particular, the transfer of large numbers of officers and NCOs from the schools and training centers to expand the units in the Operating Force eliminated the pool of personnel that in the past were available to constitute a training capability in a theater of operations. The Army Reserve (USAR) training units that were maintained to train U.S. troops and could also train foreign troops were reduced in number. The military missions and groups that for many years had operated the Security Assistance program and training efforts worldwide were cut to save money and personnel spaces. As a result, the Army was once again forced to improvise when it became necessary to raise and train Iraqi and Afghan military and security forces. It is necessary to build into the Army force structure a way to retain the trainers and the training units even when they are not needed—especially when they are not needed.

The Army is engaged in forming foreign military forces in Iraq, Afghanistan, and on a smaller scale in other countries world-wide. The current Army and DOD program to form foreign forces in Iraq and Afghanistan is called Security Force Assistance (SFA).¹⁰⁷ SFA is defined as “unified action to generate, employ, and sustain local, host-nation, or

107. This section is based on Department of the Army, *Field Manual 3.07.1, Security Force Assistance*, May 2009, and *Commander's Handbook for Security Force Assistance*, (Fort Leavenworth, KS: Joint Center for International Security Force Assistance), 14 July 2008.

regional security forces in support of legitimate authorities.”¹⁰⁸ Unified action comprises “joint, interagency, intergovernmental, and multinational community activity in cooperative effort with international organizations, non-governmental organizations, and private companies to ensure and support unity of effort in Security Force Assistance (SFA).”¹⁰⁹ It focuses on military police, border troops, and other paramilitary organizations, including local and regional forces as appropriate. The SFA program consolidates a number of disparate efforts that were “scattered across multiple Service Handbooks and lessons learned.” It has been partially successful in simplifying and codifying the provision of this IW capability. The Army recognizes the existence of other operations or programs that relate to SFA, including security cooperation, security assistance, and foreign internal defense, but does not integrate them into the SFA program. Instead, most of the current SFA effort concentrates on what is happening in Iraq and Afghanistan, in order to include the training teams and other elements already involved in forming security forces in these countries and combat elements that can provide more personnel for this task.

The Army approach to SFA focuses largely on using the BCT as the primary vehicle for training and mentoring foreign forces at brigade level and below. Because, unlike during previous conflicts, it lacked an institutional capability to provide enough qualified trainers and advisors for this task, the Army re-missioned selected BCTs to perform it. The Advise and Assist Brigades (AAB) are intended to fulfill three missions: train and partner with Iraqi or Afghan units; provide security to facilitate this training; conduct other aspects of Stability Operations. The AABs will incorporate existing training and transition teams in Iraq and Afghanistan and operate on an area basis. The AAB approach seems to be an improvement over the previous efforts, but it remains a temporary, improvised solution that requires a BCT to be retrained, re-equipped, and reorganized to such an extent that (despite Army claims to the contrary) it would not be readily available for an MCO. Despite this disadvantage, the AABs may be a good way to perform this important mission. The Army is forming eight AABs by converting, mostly, HBCTs that are not deemed as useful for counterinsurgency operations. The AABs’ configuration and training is discussed subsequently, along with other BCT variations.

In general, the SFA doctrine is a reasonable approach. It draws on previous experience and common sense to provide guidance to military personnel assigned to the mission. Its origins reveal the extent to which the Army ignored this potentially important mission until after the need appeared. It is yet another instance in which the Army was forced to improvise and reorganize BCTs to do the work.

¹⁰⁸. FM 3.07.1, v.

¹⁰⁹. *Commander’s Handbook*, 1.

Forming foreign forces is not limited to insurgencies or Stability Operations. It may also be required to improve the performance of allied forces and during MCOs. As such, it is a major consideration for the theater commanders and the G3 staffs that have responsibility for both operations and training. This function requires soldiers who have tactical knowledge, teaching skills, knowledge of their students, and an aptitude for dealing with foreign people and cultures. It is not economically feasible to maintain a separate capability to do this work in peacetime, but it would be possible to better prepare to do it again in a different way for a future campaign. This could be done by continuing to expand the scope of the Joint Center for International SFA to cover the operational and strategic elements of this capability, learning from current experience, and being ready to create a theater-wide capability for SFA when such is needed for future operations.

The Army could marshal significant numbers of military personnel capable of forming foreign forces by assigning them to Army schools and doctrinal centers as instructors and combat developers. When the need arises for members of this training cadre to join a theater advisory command, their jobs can be filled, if necessary, by recalling reservists or retired personnel. This solution does not require converting BCTs into training units or partnering them with host nation units, which reduces overall combat potential and arguably provides something less than the best training for the foreign forces. This solution would require the Army to retain “extra” personnel and capabilities to address the forming foreign forces function in the Generating Force. If these arrangements are made, the Army would have a cadre of officers and NCOs qualified by education, inclination, and experience to provide first-class mentoring and training when, once again, it becomes necessary to form a foreign military force in a host nation.

3. Securing the People

Security for the people is the *sine qua non* for achieving success with the other aspects of CMO. As an IW capability, security involves four tasks: defense against attacks, policing against crime and unrest, provision of essential supplies of food and water, and provision of medical care. Physical security is necessary but not sufficient, and the other three aspects of providing security must also be considered and delivered in sufficient amounts to provide a level of comfort that will support achieving the other capabilities. The four tasks are provided as follows:

Defense against attacks by enemy forces, insurgents, or terrorists is the first level of security that must be provided in all military operations and is of primary importance in CMO. Several kinds of units are involved in providing security for civilians in the area of operations. Protection is provided primarily by the BCTs, but all other units in a theater can and do provide protection for themselves and, when necessary, for the people in the areas for which they are responsible.

Policing to prevent crime and bring criminals to justice is necessary to provide stability and a belief that order will be maintained in daily life. This is a primary responsibility for Military Police units and host nation law enforcement agencies. There is an intrinsic difference between defense or protection and policing. Policing involves reducing crime and providing a stable environment for other aspects of military operations. It also appears to be more difficult to provide than defense.

Subsistence support to provide food, water, and sundries to the people is also part of security. Without these supplies, physical security does not provide the basis for quelling an insurgency. Initially, these supplies may be distributed by Army units, but at some point it is necessary to transition to a state where the host nation government and, ultimately, the people can support themselves. Although other units may be involved, CA units are responsible for managing this task, with the necessary supplies and transport coming from Army logistical units, other agencies of the United States government, or NGOs.

Medical care is another critical factor in providing security for the people. Military medical units and NGO medical teams can bring treatment, preventive medicine, and sanitation to halt the spread of communicable diseases and to repair the damage done by combat operations. As with subsistence support, this work should ultimately be turned over to the host nation government.

4. Winning Popular Support

Public support is required to sustain all military operations. It is the responsibility of commanders at all levels to provide for an appropriate kind and amount of effort to obtain this support. It is particularly important for the conduct of Stability Operations in a host country. Even if the local people are secure, they may not accept our advice or support us or the host nation government, particularly if an insurgency is based on ideological, cultural, or religious grounds. To win the support of the people and the key leaders of the places in which we are engaged, we need the capability to establish a communications strategy and the means to deliver it. This strategy has to counter enemy propaganda and replace it with our own message. It is important to make friends and equally important to avoid making enemies.

This capability is provided by the Information Operations Community. At the operational and tactical levels in the theater of operations, PSYOP units are the primary providers of this capability. Public Affairs units might also be useful, provided the respective roles can be defined and the boundary agreed upon. This capability can be achieved by changing the focus, target audiences, and methods to support conduct of SOs.

5. Improving the Economy

In the long term, one of the goals of IW is to help the local populace develop and operate their own economy. There are five major parts to this capability. The financial system of an economy makes money and credit available and employs modern methods of financial management. The finance ministries and banks of the host nation need to be in place and functioning properly. The basic infrastructure systems of food, water, energy, communications, health care, housing, transportation, manufacturing, trade, and land and natural resource management all need to be operational. Commerce and trade in the area of operations will need to be stimulated. Modern technology should be introduced when and where appropriate. Finally, it is necessary to do things in ways that do the least amount of harm to the environment. The area of operations is likely to be in poor condition, and it makes sense to adhere to international standards for environmental conservation to the greatest extent possible.

Improving the local economy is the responsibility of CA units, Engineer units for construction and maintenance, contracting teams, Judge Advocate General units, and provisional units, such as Provincial Reconstruction Teams, formed specifically to provide this capability. Ensuring unity of effort for these varied elements is discussed below. Military units will have to do this job in non-permissive environments where civilians cannot work safely. Once the area is secure, DOD civilian employees, civil agencies, and NGOs can assume some or all of the responsibility for this capability.

6. Improving Governance

The ultimate goal is to restore a government that will rule on behalf of the people of the host nation. This means promoting good governance. With due deference to the local culture, good governance is defined as some form of representation that exists to help the people. Good governance requires laws and adherence to the rule of law. It may be necessary to help host nation officials write a constitution as well as provide a legal framework that is suited to their culture and traditions. Laws have to be enforced, and it is necessary to establish a law enforcement system that will deter, detect, investigate, and solve crimes, and then turn the suspects over to an impartial judicial system with courts to hear cases and dispense justice. Units helping the host nation must be able to convince officials of that nation that honesty, adhering to the rule of law, and eliminating corruption are necessary to improve governance. Finally, the officials and the entire governmental system must be competent.

Improving governance in the host nation or occupied areas is the responsibility of CA units, JAG units, interagency civilians, and provisional units with personnel from U.S. and allied civil agencies. Initial actions to provide governance in non-permissive environments will be taken by these military units and, as security improves, civilians

from other government agencies and international organizations can assume responsibility for providing this capability.

7. Collaborating with Others

All commanders in a theater of operations are responsible for collaborating with other agencies as necessary to accomplish their missions. Military units engaged in MCOs collaborate constantly with allied and host nation military forces. Military units engaged in Stability Operations also collaborate with civil agencies of the federal government, allied governments, host nation and local governments, and non-governmental and private sector organizations. It is essential that all of these collaborative efforts be consistent with the conduct of the campaign and that all of the various elements work together harmoniously. In order to carry out this command function, it is useful for commanders to have a central focal point or clearing-house where all of the collaborators can engage and inform each other, and learn to work together for a common goal. CMOCs at theater and intermediate tactical headquarters can perform this function, supported by Civil Affairs units, our government, and allied and host governments. As a major supporting activity, the CMOC will help commanders achieve unity of effort.

8. Understanding the IW Concept

It is the responsibility of the DOD training establishment on a large scale to teach and inculcate the principles and practices needed to provide IW capabilities. IW concepts should be covered at the appropriate level in all schools and training centers. Recruits should learn about the Spectrum of Operations and CMO basics, and enlisted leaders should receive additional instruction through their schools. Officers should receive IW instruction in pre-commissioning programs and throughout their professional military education. In other words, the scope and depth of the instruction would increase as officers move from basic schools through command and staff schools to the Senior Service Colleges.

E. Unit Types that Provide IW Capabilities

Table 40 shows the types of Army or joint units that provide the IW capabilities for military operations. There are two general kinds of units that provide IW capabilities. Key IW unit types shown in bold type are designed to provide IW capabilities. Having adequate numbers and an appropriate mix is essential to be able to conduct CMO and provide IW capabilities for other kinds of operations. Other unit types provide a wide range of capabilities for the Army warfighting functions, as well as for IW capabilities. These unit types may be needed in larger numbers when there is emphasis on the IW aspects of an operation.

Table 42. Unit Types, Organizations, and Programs that Provide IW Capabilities

IW Capability	Relevant Unit Types, Organizations, and Programs
Know the Area of Operations	Civil Affairs, PSYOP, Provincial Reconstruction Teams, Human Terrain Teams , Intelligence units, SOF, DOD Programs
Form Foreign Forces	Mobile Training Teams, Military Missions, Advisory Groups, SOF, Security Assistance Teams, Advise & Assist Brigades
Provide Security	BCTs, Maneuver Enhancement Brigades, Military Police, SOF, sustainment brigades, Civil Affairs (for subsistence), Medical (for healthcare), theater sustainment commands (for logistical support)
Win Public Support	All Commanders, CMOC, PSYOP, Civil Affairs , Public Affairs, Chaplains
Improve the Economy	Civil Affairs, Provincial Reconstruction Teams , Engineer units, JAG units, contracting teams
Improve Governance	Civil Affairs , Provincial Reconstruction Teams, JAG units
Collaborate with Civil Agencies	All Commanders, CMOC, Civil Affairs , Provincial Reconstruction Teams, Chaplains
Understand the IW Concept	DOD-wide Education and Training Programs; Service training centers and schools

The key IW unit types include CA, PSYOP, Provincial Reconstruction Teams, HTTs, Mobile Training Teams, Military Missions, Advisory Groups, Security Assistance Teams, CMOCs, and possibly other provisional units. Other unit types are designed to provide a range of capabilities, of which IW are but one. For example, Military Police units can secure local areas, and detain suspected insurgents in CMO and also control battlefield circulation and rear area security in MCOs. For these unit types, CMO, which tend to be of longer duration, may require maintaining in the force structure some unit types in greater quantities than would be needed just for MCOs or LIOs.

F. The Role of BCTs in Providing IW Capabilities

There is general agreement that the BCTs have a role in providing IW capabilities, but there is some disagreement on how exactly how that should be done. Much of the discussion about Full-Spectrum Operations focuses on how to use the BCTs of the Expeditionary Force to provide IW capabilities. This approach is necessary because the Army has concentrated most its combat power in the 73 BCTs, but it is not sufficient. Some of these capabilities can be provided by theater elements other than BCTs and some of them can be found in the Generating Force and other DOD components.

This section addresses six ways to better enable BCTs to provide IW capabilities:

- Modifying the BCTs for IW by assigning CMO units,
- Attaching IW units to BCTs during task organization,
- Forming Advise and Assist Brigades,
- Placing IW units in direct support of BCTs during task organization,
- Placing area-oriented IW units in general support of BCTs, and
- Forming task forces that include BCTs and IW unit types.

In order to set the stage for this discussion, it is useful to establish the terms that govern relationships among Army units when task-organized for operations. Table 43 shows some of the terms that apply.¹¹⁰

Table 43. Relationships between Supported and Supporting Units

Relationship	Mission Tasking	Sustainment Support	Rating Officer
Assigned (Permanent)	Parent Unit	Parent Unit	Parent Unit
Attached (Temporary)	Supported Unit	Supported	Supporting*
Direct Support (DS)	Supported Unit	Supporting	Supporting*
General Support (GS)	Supporting Unit w/notice to Supported Unit	Supporting	Supporting

* With comments by the unit commander.

1. Modifying BCTs for IW by Assigning Civil-Military Operation (CMO) Units

This approach modifies the composition of some BCTs by adding CMO units and personnel and subtracting MCO-like units and personnel on a long-term basis. One version of this approach is shown in Table 44.¹¹¹ The additions total 855 soldiers and the reductions total 444, creating a net increase of 411, which increases the BCT(+) strength from 3,430 to 3,841 soldiers. The exact configuration would depend on the situation. The organizational chart for this version of a modified IBCT is in Figure 13.¹¹² Modifying IBCTs as indicated below creates a set of BCTs that are optimized for SOs but makes efficient use of CMO units that are in short supply. It also limits the ability of division and corps commanders to task organize for mission accomplishment. Using these

¹¹⁰. FM 3-0. Tables B-2 and B-3 present, respectively, the command relationships and support relationships that are used by the Army. Table 41 is a simplified composite view of some of the possibilities.

¹¹¹. Freeman, Waldo, Institutional Adaptability: IBCT Modifications Notional Example, Draft Working Paper, March 2009.

¹¹². Ibid.

modified BCTs for MCOs would require modifying them again and returning the soldiers removed in the original modification.

Table 44. Possible Conversion of IBCTs for Stability Operations (SO)

Additions: 855 Troops	Subtractions/Conversions: 444 Troops
Civil-Military Operations Center (25)	Convert half of Headquarters Company
Civil Affairs Company (68)	Convert one-third of each Infantry Battalion
PSYOP Team (11)	Convert one-third of RSTA Battalion
Explosive Ordnance Disposal Detachment (35)	Reduce Fires Battalion strength
Human Terrain Team (9)	Convert Battery to Security Company
3 Intelligence Detachments (90)	Reduce Brigade Support Battalion strength
Electronic Warfare Detachment (15)	
Contracting Team (10)	
Military Police Company (122)	
Military Police Working Dog Team (22)	
Interpreters (100)	
2 Engineer Companies (148)	
2 Rifle Companies for security (200)	

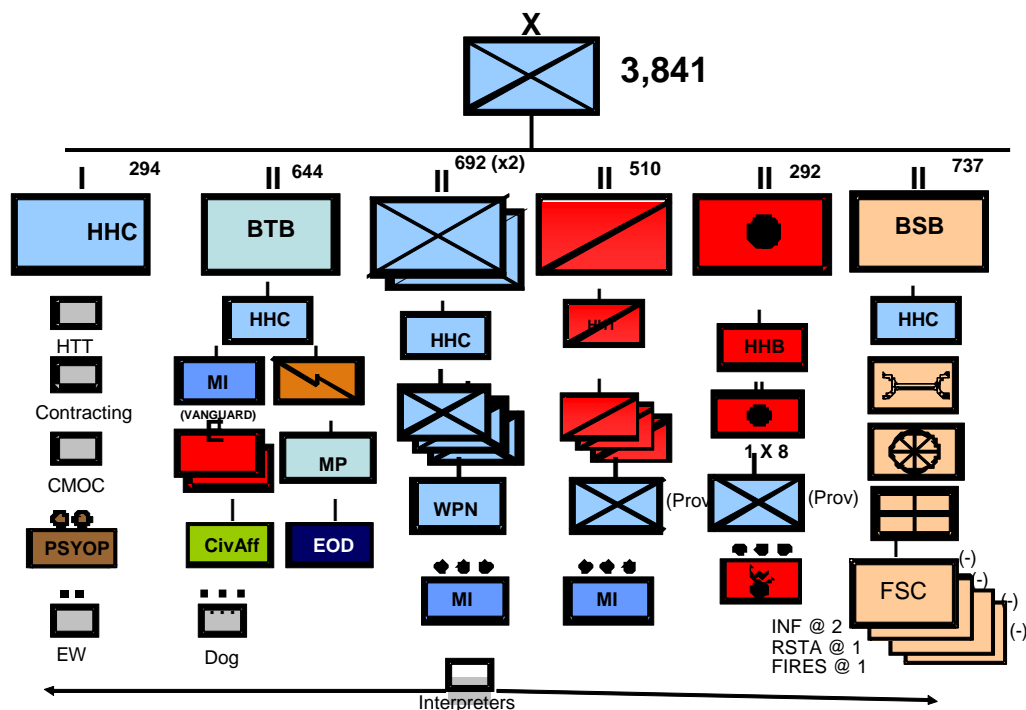


Figure 13. IBCT Modified for Stability Operations (SO)

2. Attaching Units to BCTs during Task Organization

Another approach is to leave the BCT itself intact but provide IW capabilities by attaching on a short-term basis suitable individuals, teams, detachments, or companies to the BCT from a larger formation (division or corps) for a particular operation. The BCT commander would be able to task the attached elements and mix and match them within the BCT framework when the BCT is task-organized for its mission. This kind of relationship has the same effect as assigning the IW elements permanently, but they can be modified during the next planning cycle or upon completion of a phase in the operation being conducted. It is a way to make the BCT more versatile and more capable of doing what it is expected to do by a higher headquarters. This kind of tailoring is facilitated by the existence of the Brigade Troops Battalion (BTB) in the BCTs.¹¹³ The BTB provides a “home” for the support of the attached teams and detachments with a lieutenant colonel and staff to facilitate their work.

3. Forming Advise and Assist Brigades

The Army is forming eight Advise and Assist Brigades (AABs) that are organized, equipped, and trained to perform SFA missions in Iraq. Four of these brigades have been deployed, and the other four will be available to replace them.

According to the weekly defense newsletter, *Inside the Army*, “An advise and assist brigade is a modular brigade combat team augmented, based on the requirements of the operational environment, with enabling assets and capabilities to support a distributed security force assistance mission.”¹¹⁴ The AABs are formed by modifying and augmenting BCTs (mostly HBCTs) and providing them with special training for the SFA mission, which is “organizing, training, equipping, rebuilding and advising foreign security forces.”¹¹⁵ The AABs are focused primarily on training Iraqi security forces and police, and they will incorporate or work with existing military transition and police training teams. They are also in Afghanistan.

The general idea behind the AABs is to retrain and re-equip existing battalions for new missions. The emphasis will be on three missions. One combined arms battalion will provide security—about 25% of the effort. The second combined arms battalion and the RSTA battalion will train Iraqi units—about 35%. The fires battalion will perform stability operations—about 40%. Existing SFA and IW units will be attached to the AAB. The brigades will be assigned on an area basis and work with specific Iraqi units.

¹¹³. Comment by James Lacey, IDA, 9 June 2009.

¹¹⁴. Brannen, Kate, “Army Introduces Advise and Assist Brigades for SFA Missions,” *Inside the Army*, (6 April 2009), http://www.insidedefense.com/secure/display.asp?docnum=ARMY-21-13-4&f=defense_2002.ask.

¹¹⁵. *Commander's Handbook*, 3.

The initial AAB is the 4th BCT of the 4th Armored Division, which received special training in May 2009, prior to deployment for duty in Southern Iraq. The special training program for this BCT included the following events:

- Sixty NCOs went to Fort Bragg for a two-week CA course, after which the NCOs worked in downtown El Paso performing assessments and other tasks that would assist Provincial Reconstruction Teams in Iraq.
- Twenty troops attended a city manager course in Austin, Texas, and worked with the city manager's office in El Paso.
- Sixty troops attended a course by the Border Patrol on border security.

In addition to this special training, the AABs also train on Full-Spectrum Operations and, according to the Army, will be able to perform their combat missions in addition to their SFA mission. The Army contends that the AABs can re-mission back to full combat operations easily and quickly. The official doctrine, according a doctrine writer at Fort Leavenworth, is as follows:

By re-missioning the brigade through a direct process, they will retain their ability to re-optimize if necessary should the threat situation change significantly...this is the major difference between re-missioning full spectrum forces as opposed to creating specialized formations—a specialized formation cannot be re-missioned.¹¹⁶

The AABs are a temporary solution for an immediate problem: how to continue training Iraqi forces after combat BCTs are withdrawn. They may provide a long-term solution to the current SFA mission. The AABs will also provide IW capabilities directly, in addition to forming foreign forces.

4. Placing IW Units in Direct Support of BCTs

Another alternative is to place selected IW units in direct support of BCTs for a particular operation. Attachment requires the supported unit to provide full administrative and logistical support to the attached unit, and this may be beyond the capability of some of the supported units. In those cases, it may be better to place the supporting units in direct support. This relationship allows the supported commander to tell the supporting unit what to do but does not require him to support the direct support unit. The BCT is not designed to provide support for other units, so this might be a better solution. This also provides more flexibility to the supporting elements because they can change or remove the direct support unit as necessary or as ordered by a higher headquarters.

116.Brannen, 2002.

5. Placing Area-Oriented IW Units in General Support of BCTs

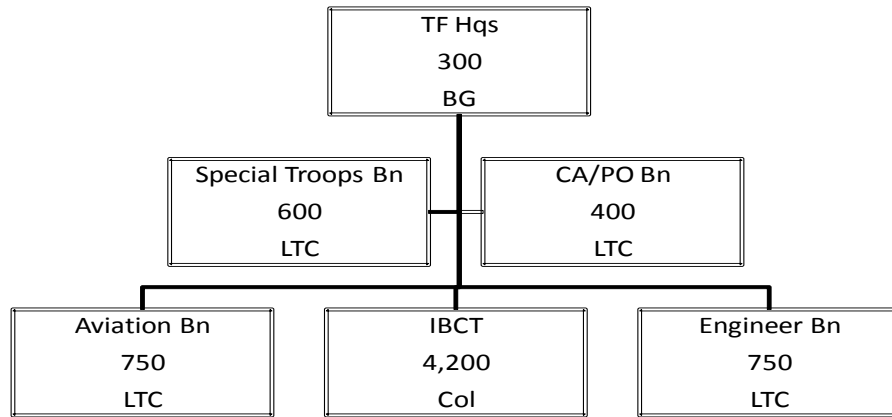
Another option for providing IW capabilities to BCTs is to establish two different chains of command to provide IW capabilities: one at the tactical level and another at the operational level. At the tactical level, there is already a CMO Staff Section in the BCT, Division, and Corps headquarters. At the operational level, there would be a Theater CMO Command that would command subordinate CMO units organized on either an area basis (for static operations) or a general support basis (for dynamic operations). In this construct, the function of the CMO Staff sections in the BCT and higher headquarters is either to handle tactical CMO issues, or obtain direct or general support from the CMO Command.

The BCT headquarters includes a two-person staff section for CMO and another similar staff section for PSYOP. In addition to knowledge about conducting CMO, these sections also provide a technical channel of communication to other Civil Affairs and PSYOP units providing general support in the area of operations.

The advantage of this kind of support in Full-Spectrum Operations is that the theater commander can tailor his forces to provide IW capabilities for units and provide a longer-term presence for localities, cities, and provinces in the host nation. When all of this kind of support is attached to the BCTs, the support moves when the BCT moves, disrupting the communications and collaboration arrangements that have been made with the local authorities. With this dual arrangement, the area-based elements stay in place when the BCTs move around. This method also makes the best use of IW capabilities that will always be insufficient to the need.

6. Forming Task Forces for Operations that Include BCTs

Another way to provide full-spectrum capabilities is to form task forces for IW Operations that include one or more BCTs and additional elements that provide more capabilities than those found in the BCT itself. The advantage of this approach, which is used routinely by the Marine Corps, is that it permits the BCT to focus on its core Mission Essential Task List while also being able, when task-organized, to conduct other kinds of operations, including LIOs and SOs. This approach can also be used for a small operation with one BCT and other task force units to extend the capability of the BCT. It can be applied to a larger operation, in which several BCTs operate under a division headquarters. The same approach can be used for SOs within a theater. A one-BCT LIO task force model is shown in Figure 14.



Task Force = 7,000 personnel

Figure 14. Example of a Task Force for a Limited Intervention Operation

In this example, the task force is commanded by a brigadier general, and the task force headquarters has been formed, including a CMO and a linguistic detachment. An IBCT has been attached as the major element of the task force. An aviation battalion has been attached for tactical mobility, and a composite engineer battalion has been attached for minor construction tasks and road building. A special troops battalion has been formed with a multi-functional battalion headquarters, a Military Police company, a medical company, a composite maintenance company, and a light truck company. The CA/PSYOP battalion is a composite unit with a CA battalion headquarters, a CA Company, PSYOP Platoon, Intelligence Company, and an HTT. As the task force prepares for the operation, the commander task-organizes his subordinate elements to fit the circumstances and carry out the commander's plan. The task force is organized in advance and trains and rehearses as it will operate.¹¹⁷

This kind of task organization can be formed also at the division level with several BCTs and a mix of CS and CSS units determined by the mission and situation. The extent to which task organization can be applied depends on having the appropriate numbers and mix of unit types available in the theater of operations, which in turn depends on having the appropriate numbers and mix of unit types in the Army's force structure.

7. BCTs and IW Capabilities

The preceding discussion presented several different ways to enhance the ability of BCTs to engage in CMO by adding IW capabilities. All of these ways are possible, but all are not equally desirable. Flexibility is inversely related to permanence. Permanent modifications to BCTs reduce flexibility in the theater and make it more difficult to

¹¹⁷. This is the way that the Marine Corps forms its Marine Air-Ground Task Forces.

conduct Full-Spectrum Operations. Re-missioning BCTs or assigning IW units to BCTs should be done only when other measures are not possible. Attaching IW units or placing them in direct or general support of BCTs provides additional capabilities without unduly limiting flexibility. Table 45 compares the different approaches for enabling BCTs to conduct Stability Operations.

Table 45. Comparison of Alternatives for Using BCTs in Stability Operations

BCT Variation	Use of Scarce IW Units	Full Spectrum Utility	Comments
BCTs with IW units assigned	Hinders flexible use	Reduces MCO capability	Hard to task organize
AABs	Uses available units for local advantage	Not available in a timely manner for an MCO	Temporary solution to an immediate problem
BCTs with attached IW units	Permits flexible use	Can be full-spectrum	Good for static, sustained CMO
BCTs with IW units in Direct Support	Permits flexible use	Can be full-spectrum	Good for static, sustained CMO
BCTs with IW units in General Support	Promotes flexible use	Can be full-spectrum	Good for static, sustained CMO
Task Forces with BCTs and IW units	Promotes effective use	Can be full-spectrum	Excellent for limited intervention operations

G. Observations

Providing IW capabilities for the ongoing campaigns in Iraq and Afghanistan has been difficult for the Army in particular and DOD in general. Despite ample warning of the nature of future assignments to these campaigns, too little was done to provide sufficient units and trained personnel to conduct SOs. The problem has been compounded by the existence of several different communities that have pursued the same issues in different ways and apart from one another. These communities will be discussed in the next chapter. Unless some improvements are made, the current unsatisfactory situation will continue to exist.

There is a specific set of IW units that provide IW capabilities, and these have been identified above.

It has been difficult to find a clear solution to the taxonomical redundancy and confusion that exists in this area. The conventions adopted in this analysis to clarify the situation help somewhat, but are not entirely satisfactory. They do provide, however, the basis for the Army and DOD to make the management and funding changes needed to provide IW capabilities when and where needed in appropriate amounts. The next chapter addresses this topic and proposes a solution that will institutionalize the provision of the IW capabilities identified in this chapter.

7. Institutionalizing Irregular Warfare

A. Introduction

This chapter addresses how the Army can integrate its multiple programs for providing IW capabilities into a single program. All of the capabilities needed to provide IW capabilities for the Spectrum of Operations already exist in the Army (and DOD) in some form, but they are not well integrated. These capabilities require relatively few, albeit highly skilled and relatively senior, people. There are no more than 35,000 Army military personnel that specialize in providing IW capabilities. They are highly skilled but relatively inexpensive because they do not require the acquisition or operation of expensive platforms or systems. They tend to exist apart from the main Army and are grouped in separate communities of interest. They communicate mostly with others within the same community. They are almost always unable to provide sufficient mass and energy when called on to contribute, as was the case for OIF and OEF. IW capabilities have been forthcoming but usually have been provided hastily and by improvisation. This contrasts with other Army communities, such as Aviation, that have had the advantage of shared history, doctrine, training, and tactics, and have quickly done well on the battlefield.

Institutionalization of a function or program in a large organization requires support from a community of interest that includes junior and senior people whose careers and aspirations draw from that function and who are devoted to it. A community of interest needs a history, a center for preserving that history and formulating doctrine, a school for teaching the history and the doctrine, and a recognizable set of units to implement the doctrine. A viable community of interest whose mission is to provide IW capabilities to the GPF of the Army would reduce improvisation and emphasize preparation. Conditions that would allow an IW community of interest to flourish in DOD or Army include oversight and advocacy by a single office in the Army Staff headed by a general officer, ownership by a major Army command, a doctrinal center and school, effective presence on the staff of theater and tactical headquarters, and a coherent set of Active, Guard, and Reserve units.

The following section emphasizes the need for an integrated IW program and suggests ways the Army can accomplish this. The section discusses the boundary between what SOF do and what the GPF do in providing IW capabilities, emphasizing GPF. The last two sections deal with how the various IW elements can be brought together and operate during campaigns.

B. The Essential Disunity of IW-Related Programs

The several IW-related programs discussed in the previous chapters are all engaged, more or less, in doing the same things under different names with different people. The disunity among these programs contributes to the complexity of this aspect of military operations and has caused or exacerbated many of the problems that have been experienced in the field. Table 46 lists the major IW programs, showing whether and to what extent they address the eight IW capabilities. Even at this high level of abstraction, it is clear that these programs, with the notable exception of SFA, include the same things, albeit with slightly different terms and emphasis. (SFA will be addressed separately below.)

Table 46. Capabilities of Major IW-Related Programs

IW Capability	Stability Operations FM 3-07¹¹⁸	Security Force Assistance	Civil-Military Operations JP 3-57¹¹⁹	Counter-Insurgency FM 3-24¹²⁰	Complex Operations NDU¹²¹
Knowing the Area of Operations		Understand Operational Environment		Know the culture; speak the language	
Forming Foreign Military and Police Forces		Major Emphasis			
Securing the People	Safe and Secure Environment		Populace & Resources Control; Foreign Humanitarian Assistance	Civil Security, Civil Control, Essential Services	Restore & Maintain Security
Winning Popular Support	Social Well Being	Manage Information	Civil Information Management		Support reconciliation; foster social change
Improving the Economy	Sustainable Economy		Nation Assistance	Economic & Infrastructure Development	Conduct reconstruction, Sustain Economic Development
Improving Governance	Established Rule of Law; Stable Governance	Build Legitimacy	Support to Civil Administration	Governance	Promote Effective Governance
Collaborating with Others			Unity of Effort	Unity of Effort	
Understanding the IW Concept					

¹¹⁸. Department of the Army, FM 3-06, Stability Operations, October 2008, 1–16 to 1–18.

¹¹⁹. Joint Publication, 3-57, Civil-Military Operations, Joint Staff, 8 July 2008, 1–9 to 1–14.

¹²⁰. Department of the Army, FM 3-24, Counterinsurgency, December 2006, 1–19, passim.

¹²¹. Bennendijk, Hans and Patrick M Cronin, eds., *Civilian Surge: Key to Complex Operations*, (Washington, D.C.: National Defense University Press, 2009), 17–18.

When the comparison is made at a lower level, the essential similarity is even more evident. For example, each of these programs stresses the need for knowledge of the area of operations (e.g., language, culture, geography) but some do not make it a major point. Similarly, none stresses basic knowledge of the IW Concept, perhaps because they are operations-oriented and uninvolved with the training and education programs of the Services responsible for imparting that knowledge. Also, the need for collaboration with others (e.g., allies, civilian agencies, NGOs) is also stressed but not mentioned as a major capability. The existence of four or more “stovepipes” that address, essentially, the same topics is a disadvantage to DOD. This chapter suggests a way for the Army to consolidate its own elements into one coherent program.

C. Differentiating Between IW Capabilities for Special Operations Forces (SOF) and General Purpose Forces (GPF)

One of the essential steps in integrating the provision of IW capabilities is to understand the relationship in this area between the Army and the SOF. The Army provides about 28,000 military personnel and 2,000 civilian employees to the SOCOM. These SOF soldiers are a highly trained, specially equipped, and costly group of officers and senior NCOs. They include seven Special Forces Groups, the 75th Ranger Regiment, Delta Force, the 160th Special Operations Aviation Brigade, Active Army CA and PSYOP units, and base operations, training, and educational activities. These elements are assigned to SOCOM, which has a charter to conduct global operations. In foreign operations, SOF elements from all of the Services operate in conjunction with, but not under the command of, the regional combatant commander.

SOF units have conducted extensive combat operations in OIF and OEF that complement and support the efforts of the GPF. Despite the problems inherent in having two major commands operating side-by-side in the same theater, there appears to be a workable arrangement for kinetic operations. It may be more difficult to reconcile the differences between how SOF and the Army share responsibility for providing IW capabilities. In addition to combat operations, SOF also conduct localized SOs on a global scale. In this respect, SOF and the IW part of the GPF are doing the same kinds of tasks and competing for missions and resources. This must be understood in order to design the Army for Full-Spectrum Operations.

SOF has an important role in SOs. The difference between what SOF and GPF of the Army do is one of scale, not kind. SOF units can provide security and help form foreign forces. They operate in small teams and work with small elements of the local forces. If the mission is to train elements of an existing force on small unit tactics, SOF should be used. If the mission is to establish a national army and/or police force, GPF should be used, with backup from the Generating Force and other DOD components. SOF units do not get involved in improving an economy or governance. This means that

the bulk of the work involved in providing IW capabilities across the Spectrum of Operations has to be done by GPF. Table 47 summarizes the major differences between SOF and GPF capabilities.

Table 47. Differences between SOF and GPF for IW Capabilities

IW Capability	Special Operations Forces	General Purpose Forces
Knowing the Area of Operations	Fluency in language and detailed knowledge of specific countries and localities.	Fluency and deep knowledge for a few specialists; fluency and adequate knowledge for many leaders; familiarity for deployed troops
Forming Foreign Military and Police Forces	Train and mentor small units, often special operations forces, at a tactical level. Establish a close relationship with partners.	Build a balanced national force with a defense ministry, a training and logistics base, and a balanced set of units to enable conduct of security and other operations
Securing the People	Advise counterparts on how to protect themselves and their localities.	Secure the theater and provide mass care through US channels as necessary until host nation forces and agencies can do it.
Winning Popular Support	Win friends by setting a good example at the local level	Engage in public information campaigns to promote the US message, demote the enemy message, and persuade local officials and people that we are working for their welfare.
Improving the Economy	Not a mission	Use experts and funds to assist locals in economic development
Improving Governance	Not a mission	Use experts and on-site assistance to enable improvements in governance.
Collaborating with Others	Work with local military forces and civil authorities	Work with other US agencies, host nations, allies, coalition forces, NGOs, and the private sector
Understanding the IW Concept	Full understanding necessary	Full understanding necessary

D. Integrating IW Units in the Army

The Army already has units that provide IW capabilities, but these are in short supply and the Army has been forced to improvise and create *ad hoc* units to provide IW capabilities to the GPF in current campaigns. One of the proximate causes of this response to the need has been the lack of a strong Army branch with units that provide a robust capability for IW and a unified doctrine for employment of these units. To correct this, the Army should consider consolidating into a single branch all of the key units, elements, and programs that provide IW capabilities and adopting a single, unified doctrine for the employment of these capabilities in Full-Spectrum Operations.

A new Army Civil-Military (CM) Branch would provide a body of soldiers trained and educated to assist tactical commanders to deal with the civil aspects of their military operations.¹²² This new CM Branch would include existing elements that provide IW capabilities: CA, HTTs, Provincial Reconstruction Teams, and similar provisional units. Of these, the largest by far is the CA Branch, which is the logical basis upon which to establish the broader and larger CM Branch. The CM Branch would promote and maintain area knowledge and language fluency (other than that for the Intelligence Community), provide security for civilians, promote economic development and improved governance in host nations, and serve as the focal point for collaboration with host nation governments, civilian agencies, and NGOs. To structure this expanded branch to provide IW capabilities, several organizational changes would have to be made. (The capability for forming foreign forces would remain separate from the CM Branch and would remain the responsibility of the operational commanders and staffs at theater headquarters or a special theater level command.) Realigning Army CA units between SOF and GPF is essential to institutionalizing the CM function. At present, the Army's CA units are divided. All of the AC CA units are assigned to SOCOM and deemed to be SOF. All of the USAR CA units are in the GPF. There is a history that explains this strange state of affairs, but it is more important to note that it results in an unbalanced level of support. As it stands today, the Expeditionary Army has to rely completely on USAR units because the AC CA and PSYOP units are being integrated into the core operations of SOCOM. This awkward arrangement makes it difficult to provide adequate IW capabilities to the GPF and is one of the reasons so many provisional elements have been needed. The current and projected CA force structure is shown in Table 48.

Table 48. Civil Affairs Strength and Structure

	FY 2010			FY 2013		
	General Purpose Forces		Special Operations Forces	General Purpose Forces		Special Operations Forces
	USAR	AC	AC	USAR	AC	AC
Military Personnel	7,565		906	8,377	1,427	1,267
Commands	4			4		
Brigades	9		1	9	1	1
Battalions	29		4	33	5	5

¹²². The name "Civil-Military Operations Branch" should be considered a working title. The final name will have to be agreed to by those who are to be merged into the new branch.

These numbers show that the SOF presently have 905 CA soldiers to support 28,000 SOF (1 per 31) soldiers while the GPF have only 7,565 CA soldiers—all Reservists—to support 800,000 GPF soldiers (1 per 106). This unbalanced allocation of personnel will be alleviated to some extent by the formation in FY2010 of a brigade and five battalions in the Active Army and four additional battalions in the USAR for a total of 9,804 CA soldiers for the GPF. This action, however, will not occur for several years and represents a very modest increase in total CA capability. Transferring some CA units now programmed for SOF to GPF would speed up the expansion of GPF support. The starting point for this action should be an independent assessment of how many CA soldiers are needed to support SOF operations and the best way to provide that support. Once the proposed CM Branch has been approved, it would be a good idea to decide concurrently the necessary steady-state composition of that branch to support future operations in OIF and OEF.

SOs, CM Functions, and the CA Branch should be merged into one program and carried out by one unified organization. The doctrine for these three elements is essentially identical. SO is favored in parts of OSD and has broad support in TRADOC. The intellectual center of this community in the Army is the Peacekeeping and Stability Operations Institute at the Army War College. When the Army published its new Field Manual 3-0 on Operations, SO was named as one of four major Army Operations, and the CM Function was not mentioned at all. The CM Function is espoused by the Joint Staff and the CA community. The CA Branch has performed well in the current campaigns, and has a significant number of soldiers assigned. SO, in contrast, has no dedicated troops, and that perhaps is why it stresses modifying BCTs. The Army would benefit from combining these communities and schools of thought into one combined doctrine and capability.

It is useful to consider including PSYOP in the CM Branch. At present, the CA and PSYOP communities are separate and distinct even though they are both assigned to the U.S. Army Civil Affairs and Psychological Operations Command (USACAPOC) and share many of the same problems. They work together in the field habitually. Like CA units, PSYOP units are trained and equipped to carry out SOs. Also like CA units, PSYOP units are split, with AC units in SOF and USAR units in the GPF. The actual and projected PSYOP force structure is shown in Table 49.

Table 49. Psychological Operations Strength and Structure

	FY 2010			FY 2013		
	General Purpose Forces		Special Operations Forces	General Purpose Forces		Special Operations Forces
	USAR	AC	AC	USAR	AC	AC
Military Personnel	3,706		2,499	4,187		2,704
Groups	2		1	2		1
Tactical Battalions	7		1	8		1
Tactical Companies	28			32		
Dissemination Battalions			1			1
Dissemination Companies	1			1		
Regional Battalions			4			5

E. Adopting a New Operational Concept for CM Units

There are too few CA units and personnel to meet the demands for conducting Full-Spectrum Operations; the Army has had to create provisional units and modify BCTs to provide those capabilities. It is hard to create more CA units because of limitations on Army strength. The creation of a unified CM Branch would not per se increase the number of qualified personnel to perform this work, but it may be possible to improve the effectiveness of CMO units by modifying the operational concept for their employment.

The current concept of operations for CA units was conceived for MCOs when their primary role was at the tactical level and was designed to limit the interference of local civilians with ongoing military operations. To perform this mission, the CA units were placed in direct support of Army tactical organizations. The modern version of this concept of operations places a CA company in direct support of each BCT, a CA battalion headquarters in direct support of a division or other two-star headquarters, and a CA brigade headquarters in direct support of each corps. In addition, there are four CA command headquarters to operate CMOCs at unified command headquarters. One effect of this dispersion of CA units at the tactical level was to make it impossible to have a coordinated CA campaign for an entire theater. The CA Commands found themselves without subordinate units and could do little to conduct SOs at the operational level. In the past, tactical organizations, knowing they would receive CA support for operations, often did not fill their battalion, brigade, division, and corps CM staff sections. In effect, the CA elements were used to fill these staff sections. The major defect of this system is that the CA units moved when their supported units moved, and this disrupted their continuity and long-term presence in a particular locality, which is important for successful SOs.

It would be more efficient and effective to have a dual system for CM support. One part of the system would provide strong and influential CM staff sections in the theater and intermediate tactical headquarters. This arrangement could manage most tactical level issues for MCOs and SOs. The other part of the system would be an area-based Theater Level CM Command that retains its subordinate units and provides general support to the BCTs and other units operating in their assigned areas. A comparison of the current and proposed operational concepts is shown in Table 50.

Table 50. Comparison of Current and Proposed CM Concepts of Operations

	Current CA and PSYOP		Proposed CM
	AC	USAR	GPF
Combatant Command	SOCOM	Joint Forces Command (JFCOM)	JFCOM
Center and School	John F. Kennedy Special Warfare Center & School (JFKSWC&S)	JFKSWC&S	CM Center & School
Theater Role	Support SOF units	Augment GPF tactical Units	Provide Area-based CM support for a theater
CMO unit status	Integrated into JSOCs	DS to tactical units	GS to tactical units
Tactical Headquarters staffs	Integrated into JSOC headquarters	Small separate staff sections (G-7 & G-9)	Branch in operations (G-3) and plans (G5) staff sections
Commands	Does not apply	Role uncertain	Operate a CMOC for each regional command
Coverage	Help conduct special operations	Emphasize tactical support for MCOs	Emphasize Operational level Civil Military capabilities
Continuity	Move with SOF units	Move with tactical units	Stay in assigned AOs for the long term
Personnel Sustainment	Short-term rotation	ARFORGEN	Individual replacement

CM Staff Sections. The Modular Force has paid some attention to the CM Function. There are small, separate CA (G-9) and PSYOP (G-7) staff sections in theater, corps, division, and BCT headquarters.¹²³ However, these are separate sections that report directly to the commander. The BCT staff has one officer and one NCO for CA and an officer and NCO for PSYOP. This arrangement for staff oversight and advocacy guarantees marginalization of CA and PSYOP functions. A better way to ensure that CA and PSYOP matters are considered in planning and operations would be to place CA and PSYOP staff officers in the G-5 Plans Section that prepares the operations plans and the G-3 Operations Staff that controls current operations and training. In that way,

¹²³. Department of the Army Field Manual FM 3-0.1, The Modular Force, January 2008, passim.

CA/PSYOP functions and tasks would be integral to the formulation of plans and orders rather than a niche function to be covered in a CA/PSYOP Annex. If augmentation is needed from area-based CA and PSYOP units, the G-3 and/or G-5 can arrange it, just as they would for other enablers.

The Theater Civil-Military Command. At the operational level, a theater CM command would command all CM units in the theater. The CM Command Headquarters would provide CM advice to the theater commander and operate a Theater Joint CMOC that would be a focus for all IW capabilities (other than forming foreign forces). All of the various IW elements would coordinate their operations and pool their resources through the mechanism of the Theater Joint CMOC. The subordinate elements of the CM Command would conduct SOs in their assigned areas by means of a hierarchy of brigade headquarters, battalion headquarters, and companies. Commanders at all levels could adjust their resources in accordance with changes in the situation. Commanders at all levels would provide general support or, when indicated, direct support to BCTs and support units in their respective areas. This arrangement would provide a more efficient use of scarce CM resources and more flexibility to adapt to changing circumstances than the present concept of operations. If a particular mission required it, elements could be placed in direct support of tactical units during that operation.

In summary, the Army should consider taking the following actions:

- Establish a Civil Military Branch in the Army
- Incorporate key units that provide IW capabilities in the new CM Branch
- Assign proponentcy for the CM Branch to TRADOC
- Persuade OSD to reassign some active Army CA and PSYOP units from SOF to GPF
- Develop a unified Army doctrine that aligns SO and CA Operations in an organizational and operational manner
- Establish a new CMOC and School under TRADOC to meet the needs of the CM Branch, especially Reservists
- Encourage OSD to establish standing CMOCs at all regional command headquarters

F. Observations

This study addresses only the Army's role in providing IW capabilities. However, conducting SO and providing IW capabilities for other operations is a mission for all of the Military Services, and many of the units doing this kind of work are joint units. Institutionalizing IW can be accomplished by OSD and the Joint Staff by realigning the duties of various offices in OSD and staff sections in the Joint Staff to have one office responsible for establishing policy, advocating for budget share, and oversight of operations for an integrated CM community. The Army can, however, set an example for

the other Services and higher headquarters by taking the lead in institutionalizing its own IW units as suggested above.

This topic is fraught with complexity in terms, doctrine, and functional stovepipes. It reflects in miniature many of the problems that still make it hard to achieve true unity of effort and maximum effectiveness in ongoing operations. Unless there is action to unify and solidify this function in DOD, however, it will be as difficult in the future as it has been in the past, to maintain a ready force of skilled military personnel who can provide IW capabilities when they are needed for military operations.

Section III: Balancing Requirements and Resources

This section of the paper responds to the sponsor's guidance to find a way for the Army to be able to conduct Full-Spectrum Operations within current constraints—meaning no more military personnel strength. This was and is a challenging goal. Many problems can be solved with more resources, but it is hard to improve performance and still stay on budget. This section is the culmination of that effort.

The basic assumptions used in this analysis are as follows:

- The Army will have to be able to perform the following missions:
 - Conduct ongoing campaigns:
 - OIF at a level of about 40,000 troops for 2 years
 - OEF at a level of about 90,000 troops for 10 years
 - Other global operations at current levels indefinitely
 - Conduct LIOs with about 5 BCTs
 - Conduct Homeland Defense Operations
 - Conduct Civil Support Operations
 - Maintain a hedge against an MCO
- The Army is to be balanced in the following ways:
 - Military manpower authorizations (spaces) are less than military personnel strength (faces) and accommodate non-unit personnel
 - The current mix of HBCTs, SBCTs, and IBCTs satisfies Combatant Command (COCOM) needs
 - BCTs are supported by the number and mix of support units that will maximize their combat potential
 - The mix of units among the AC, ARNG, and USAR provides a workable compromise between costs and availabilities
 - The proportion of units provided for current campaigns and those provided for future campaigns is appropriate to hedge against future threats

It is also assumed that the Army will be authorized no more than 1,133,600 military personnel at the end of FY2010, as follows:

- AC: 569,400 personnel;
- ARNG: 358,200 personnel; and
- USAR: 206,000 personnel (including 22,000 personnel increase for three years).

This section has five chapters. Chapter 8 constructs a Future Years Defense Program (FYDP)-based model of the Army to make it easier to understand and deal with that large and complex organization. The resulting Schematic Model of the Army is a useful tool for addressing Army issues.

Chapter 9 examines the composition of the Modular BCTs in some depth. This is a continuation of previous work by IDA that focused on the number of maneuver battalions in the IBCTs and HBCTs. This issue was raised again when it was found that field commanders often preferred to have three maneuver battalions or more in their brigades. The topic remains of interest and is revisited in light of the experience in Iraq and Afghanistan.

Chapter 10 addresses the Army's role in Domestic Operations—Homeland Defense and Civil Support. Although these two operational categories take place in the same theater, they are different and need to be addressed separately. Homeland Defense has no force structure implications, but Civil Support does. The major issue is how to ensure that the Army can respond rapidly and adequately to catastrophic emergencies.

Chapter 11 addresses how the Army can hedge against the occurrence of an MCO that would require conducting conventional warfare. Several suggestions are offered to enable the Army to have this capability.

Chapter 12 establishes a methodology to determine what it would take to allow the Army to conduct Full-Spectrum Operations within current personnel and funding constraints. Using the Schematic Model from Chapter 8, the BFE from Chapter 3, and the ARFORGEN system as the basis, it was possible to test whether the Army could conduct the full spectrum of operations. During this application, it was discovered that a change in dwell policy for Guard and Reserve units could change the result from infeasible to feasible.

8. A Schematic Model of the Army

A. Introduction

This chapter presents a way to describe the Total Army in a succinct but understandable way. The Schematic Model is based on the law, the FYDP, Army organization, and Army terminology. It includes all of the various activities and programs the Army accomplishes or supports. The goal is to display what the Army does so that workload matches resources. In this chapter, the Schematic Model shows the mission/function distribution of military personnel by component and civilian employees. It can also be used to show the distribution of funds, major items of equipment, NCOs, officers, or any other descriptor of interest.

As the study began, it became apparent that there was a need to understand clearly how Army units and personnel were distributed among Army missions. Information from the Army was useful but did not provide the detail that was needed. An example of the force structure and personnel data provided by the Army is shown in Figure 15.

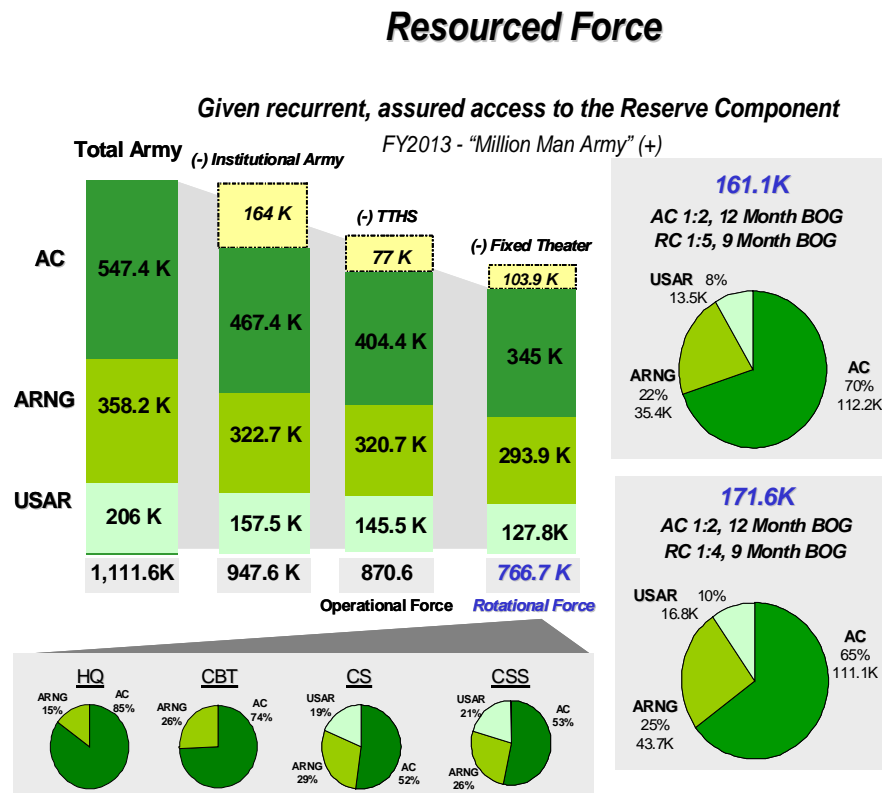


Figure 15. Sample Army Force Structure Information

The IDA team decided to adopt for study purposes a Schematic Model of the Army developed earlier by IDA to facilitate analysis of the Generating Force. It was broadened in scope and revised to be current.¹²⁴ The remainder of the chapter explains how the model is structured and suggests how it can be used.

The basic organization of the Army is established in Title 10 of the U.S. Code. Section 3062 states that “the Army consists of the Regular Army, the Army National Guard of the United States, the Army National Guard while in the service of the United States and the Army Reserve.” In Section 3013, the Secretary of the Army, “subject to the authority, direction, and control of the Secretary of Defense” is made “responsible for...all affairs of the Department of the Army, including the following functions: Recruiting, Organizing, Supplying, Equipping, Training, Servicing, Mobilizing, Demobilizing, Administering, Maintaining, the construction, outfitting, and repair of military equipment, and the construction, maintenance and repair of...real property.” Units and personnel carrying out the responsibilities of the Secretary of the Army comprise what the Army calls the “Generating Force.”

Section 162 of Title 10 addresses the assigned forces of the Combatant Commands. It says that the Secretary of the Army (and the other Service Secretaries): “shall assign all forces under their jurisdiction to unified and specified combatant commands...to perform missions assigned to those commands,” but this directive does “not include forces assigned to carry out functions of the Secretary [of the Army] listed in Section 3013.” Thus, all Army forces, other than those in the Generating Force (as defined above), are to be assigned to Combatant Commanders. In addition, and not covered specifically by the law, the Army provides trained military personnel and civilian employees to OSD, joint and combined headquarters and activities, defense agencies, and Defense-wide programs, such as intelligence, counter-intelligence, communications, counter-narcotics, security cooperation, and others. Together these assigned forces and personnel comprise the “Operating Force.”

B. Developing the Model

Table 51 shows the basic division of the Army into its two distinct parts. The Generating Force, shown in green, creates trained and ready units and personnel assigned by the Army to the Combatant Commands and other DOD-wide headquarters, activities, and programs. The Operating Force, shown in yellow, uses these Army units and personnel to conduct all military operations and accomplish the military missions of the ten Combatant Commands. The Generating Force is in effect a “factory” that provides units and personnel to its “customers.”

¹²⁴. Brinkerhoff, John R, The Institutional Army: FY 1975–FY 2003, IDA Document D-2695, April 2002.

Table 51. The Two Major Parts of the Army

Operating Force
Generating Force

Table 52 shows the basic structure of the Operating Force (or “customers”). From the left, the first text box includes Army support for non-Army activities at OSD, defense agencies, other federal agencies, and those working in combined and joint headquarters and activities, and other DOD-wide activities. The Army supplies trained officers and enlisted personnel, and in some cases units, for these programs and organizations. The second text box shows the two Commands responsible for Homeland Defense and Civil Support—U.S. Northern Command (NORTHCOM) for the continental United States, Alaska, Puerto Rico, and the U.S. Virgin Islands; and Pacific Command (PACOM) for Hawaii and the Pacific Territories. The next three boxes are functional Combatant Commands with global missions. The final right-hand box shows the part of the Army that engages in campaigns and battles outside the United States in support of the six regional Combatant Commands and the Joint Forces Command. This part of the Army is called the Expeditionary Force.

Table 52. The Operating Force

Operating Force					
OSD, Agencies Joint Hqs	NORTHCOM or PACOM ¹²⁵	SOCOM	STRATCOM	U.S. Transportation Command (TRANSCOM)	REGIONAL COMMANDS & JFCOM
Non-Army Activities/ Programs	Homeland Defense & Civil Support	Special Operations Forces	Space & Missile Defense	Surface Deployment/ Distribution	The Expeditionary Force

Table 53 shows four of the Combatant Commands and the Army service component command headquarters associated with each of them. Each of these Commands has a unique mission, and their Army component commands are also unique. The Army contribution to these Commands is relatively small, but it is also important and needs to be recognized as Army support for DOD missions.

¹²⁵ NORTHCOM and PACOM are regional commands and also share the responsibility for the US land mass if attacked.

Table 53. The Operating Force (Less the Expeditionary Force)

Operating Force (Less the Expeditionary Force)				
OSD Agencies Joint Hqs	NORTHCOM or PACOM	SOCOM	STRATCOM	TRANSCOM
Non-Army Activities/ Programs	Homeland Defense & Civil Support	Special Operation Forces	Space & Missile Defense	Surface Deployment/ Distribution
	USARNORTH USARPAC	USARSOC	USA Space & Missile Defense Command	MSD&D Command

Table 54 shows the basic organization of the Expeditionary Force. This is a force posture view that shows current disposition and perhaps location of the Army units. Some Expeditionary Force units are assigned to and under the Combatant Command authority of regional Combatant Commanders. Expeditionary Force units not assigned to a regional Combatant Commander remain assigned to and under the Combatant Command authority of the Joint Forces Command, and are held in ready state to be committed by order from the Secretary of Defense to one of the regional Combatant Commanders. The bottom row shows the Army service component command headquarters for each of these Combatant Commands. NORTHCOM may also be assigned to conduct Homeland Defense Operations within North America.

Table 54. The Expeditionary Force—Force Posture View

Expeditionary Force—Force Posture View					
Uncommitted Units	Units <i>committed</i> to one of the Regional Combatant Commands				
JFCOM	EUCOM	PACOM	SOUTHCOM	AFRICOM	CENTCOM
Forces Command	USAREUR	USARPAC	USARSO	USARAF	USARCENT

Table 55 shows a framework for designing the Expeditionary Force. The core of the Expeditionary Force consists of three rotational corps force packages that conform to the Army Force Generation model of cyclical readiness. Ideally, these three rotational corps forces would be identical in composition, but the current programmed force structure does not achieve that. This design feature does, however, allow the Army to sustain indefinitely the operations of a deployed corps size force (for service in one or more theaters of war) on a three-year cycle. The Army also provides fixed theater units that are sustained by individual replacements and provide a basic support infrastructure for ongoing or potential campaigns. The Army could also have a Strategic Reserve Force to conduct other contingency operations, as discussed in Chapter 11.

Table 55. The Expeditionary Force—Design View

Expeditionary Force—Design View				
Strategic Reserve Force	Theater Forces			
	Fixed Theater Forces	Three Rotational Corps Forces		
		Rotational Force One	Rotational Force Two	Rotational Force Three
Forces Command	Army Component Commands	Corps Headquarters	Corps Headquarters	Corps Headquarters

Table 56 shows the breakdown of the Generating Force functions. This breakdown is very much the way the Generating Force is already organized and there is an Army major command headquarters for each of the functions. There are, however, some inconsistencies in this arrangement. For example, training and education of medical professionals and technicians is performed by the Medical Command instead of TRADOC. In this model, the various elements of the “individuals” account are placed beneath the functions to which they belong. Trainees receiving initial entry training, students at Army schools or other educational institutions, and West Point cadets are included in the Individual Training & Education function. Patients and recovering soldiers in transition units pending discharge are considered part of the Health Care function. Soldiers in transit, classified as deserters, serving prison sentences, or otherwise not available for duty in units, are considered part of the Military Personnel Management function. Classifying non-unit individuals in this way helps the Army ensure that the Operating Force units are staffed to authorized strengths with trained and available military personnel. It also enables the Army to staff the training centers and schools adequately for projected trainee and student workloads.

Table 56. The Generating Force

Generating Force						
Individual Training & Education	Unit Training & Readiness	Materiel Development & Acquisition	Logistics	Health Care	Military Personnel Management	Army Administration
Training Centers, Schools & USMA	Training & Maneuver Centers	Laboratories & Test Facilities	Depots & Supply Centers	Hospitals & Clinics	Personnel Centers, Recruiting & Processing Stations	Hqs, DA Army Staff Field Operating Agencies
Trainees, Students & Cadets				Patients, Medical Trainees, Students	Transients, Prisoners, Holdees, Deserters	
Training & Doctrine Command	Forces Command	Army Materiel Command		Medical Command	Human Resources Command	Department of the Army Headquarters

Table 57 shows the results of previous IDA work based on the Army program for the end of FY 2002.¹²⁶ Some of the Operating Force mission boxes are empty and various parts of the Expeditionary Force are undifferentiated because the data to fill all of the boxes were not available when this work was completed. Total strengths for the Generating Force, Operating Force, and the Total Army are shown by component in the following order: AC, ARNG, USAR, and Civilian Employees. All personnel strength data are presented in increments of one thousand.

The Schematic Model can be used to describe the Army at a point in time for any version of the force structure that is recorded in the FYDP. Table 58 shows the Army as it was portrayed in the FY2008 Budget Submission for the end of FY2013. This example uses personnel strength as the metric for describing the Army, but other parameters such as funding, major equipment items, or major force elements, could be used to show other aspects of the Army.

¹²⁶ Ibid.

Table 57. The Army at the End of Fiscal Year 2002 (in increments of 1,000)

Operating Force: 329 + 315 + 148 + 35 = 827										
	OSD, etc.	NORTHCOM or PACOM	SOCOM	STRATCOM	TRANSCOM	Regional Commands and JFCOM				
	Non-Army Programs	HD/CS	SOF	S&MD	Surface Deployment and Distribution (SD&D)	The Expeditionary Force				
						Strategic Reserve	Theater Forces	Force One	Force Two	Force Three
Active Military	19		15		1	294				
Army National Guard	1		3			311				
Army Reserve	2		9			137				
Civilian Employees	11		1		2	21				
Total	33		28		3	762				
Generating Force: 151 + 35+ 57 + 178 = 421										
	Individual Training & Education	Unit Training & Readiness	Materiel Development & Acquisition	Logistics	Health Care	Military Personnel Management	Army Administration			
Active Military	77	17	2	1	25	25	4			
Army National Guard	4	31								
Army Reserve	17	38				2				
Civilian Employees	18	56	20	44	22	12	6			
Total	116	144	22	45	47	39	10			
Total Army: 480 + 350 + 205 + 213 = 1,248										

Table 58. Schematic Model of the Army at the End of Fiscal Year 2013 (in increments of 1,000)

Operating Force: 412 + 282 + 151 + 47 = 892										
	OSD, etc.	NORTHCOM or PACOM	SOCOM	STRATCOM	TRANSCOM	Regional Combatant Commands and JFCOM				
						The Expeditionary Force				
	Non-Army Programs	HD/CS	SOF	S&MD	SD&D	Strategic Reserve	Theater Forces	Force One	Force Two	Force Three
Active Military	14		25	1	*		14	358		
Army National Guard	*	1	3	*			13	264		
Army Reserve	*		*		*		20	129		
Civilian Employees	18		2	*	2		9	16		
Total	33	1	31	2	2		56	767		
Generating Force: 136 + 68 + 48 + 183 = 435										
	Individual Training & Education	Unit Training & Readiness	Materiel Development & Acquisition		Logistics	Health Care	Military Personnel Management	Army Administration		
Active Military	71	17	3		1	22	20	2		
Army National Guard	41	26			1					
Army Reserve	10	38								
Civilian Employees	13	66	18		39	29	11	7		
Total	135	147	21		41	51	31	9		
Total Army: 548 + 350 + 199 + 230 =1327										

C. Observations

The Schematic Model was created to provide an accurate view of the entire Army at a glance on one piece of paper. It has several potential uses:

- It provides a framework for analyses of alternative force structures within the constraints imposed on the Army. A change in strength in one box requires a rebalancing among the other boxes.
- The contents of a box can be presented in more detail and changes can be made within a box at the allocated strength without having to rebalance the entire Army.
- Preparing several tables completed for successive points in time (such as the end of fiscal years) presents the dynamics of change in the Total Army in an understandable way.

The Schematic Model is used in Chapter 12 of this paper as a basis for addressing the composition and design of the Army. During the course of developing the content of the Schematic Model to illustrate its use, some problems were discovered in the manner in which the USAR and ARNG reported their program elements. The Army has been informed of these problems.

9. Assessing the Composition of BCTs

A. Introduction

This chapter addresses in some detail the Modular BCTs. It examines the mix of BCTs and the number of maneuver battalions in the BCTs in light of experience in current operations and with respect to potential future operations.

An important issue facing the Army is whether it makes more sense to have a larger number of BCTs with two maneuver battalions or a smaller number of BCTs with three maneuver battalions. As noted in Chapter 1, in 2004 the Army opted to have two maneuver battalions in the Modular BCTs instead of the three originally recommended by the Modularity Task Force. The stated goal of the Army at that time was to have 48 AC BCTs and 34 ARNG BCTs to meet the requirements of the ARFORGEN cyclical readiness program. Since that time, however, there have been several developments that suggest it may be time to revisit the number, organization, and mix of BCTs. In 2008, the Secretary of Defense limited the Army to 45 AC BCTs so that it could use the military personnel for the three extra BCTs to improve the personnel readiness of existing units. The number of ARNG BCTs has been reduced to 28. In addition, as shown in Chapter 2, there is at least anecdotal evidence that field commanders prefer three maneuver battalions to the two prescribed for the HBCTs and IBCTs.

The key concern is whether the two-battalion BCT provides the same combat potential as the previous three-battalion AoE brigade task forces, as the Army originally claimed. The Army position was that the smaller BCT is the equivalent of the larger brigade task force because of the introduction of new high technology equipment and improved communications and surveillance capabilities in the BCTs. This argument does not consider what a three-battalion BCT would provide with the same new technology. The Army's position has also been brought into question by the experience of how BCTs were task-organized in Iraq as discussed in Chapter 2. The discussion in this chapter addresses first the mix and then the composition of the BCTs, and then comments on how this issue might be resolved.

B. Mix of BCTs

When the Modular Force was established in 2004, the mix of BCTs was determined by the mix of divisions in the previous AoE structure. There was apparently no comprehensive analysis of the resulting mix of BCTs as to whether that mix was prudent and suited for the Army's future force, so this mix in effect endorsed the pre-Modular

mix. Light divisions formed IBCTs and the heavy divisions formed HBCTs. Seven SBCTs had been planned prior to Modularity (6 AC and 1 ARNG). These plans were not changed and resulted in the current force. In 2009, the Army started to consider adding another six SBCTs while reducing HBCTs by six. Table 59 shows the current and potential future mix of BCTs. (Table 59 shows only 44 AC BCTs because it does not include the HBCT in Korea. That HBCT is part of the Theater Forces and is sustained by individual rotation. It is tailored for the Korea mission, is not considered available for other operations, and will not be included in the following analysis of BCTs and maneuver battalions.)

Table 59. Current and Possible Future Mix of Rotational BCTs

	Current Mix			Possible Future Mix		
	Active	Guard	Total	Active	Guard	Total
IBCTs	20	20	40	20	20	40
SBCTs	6	1	7	12	1	13
HBCTs	18	7	25	12	7	19
Total	44	28	72	44	28	72

One issue with regard to BCT mix is the appropriate balance between IBCTs that are well suited for the ongoing campaigns in Iraq and Afghanistan and the HBCTs that are better for an MCO that involves high-intensity conventional combat. The SBCT was originally created to be a “medium” brigade that could function in either combat environment. The recent proposal to increase the number of SBCTs at the expense of HBCTs, as shown in Table 59, appears to be intended to improve overall capability for IW. (The SBCTs are the largest of the BCTs and already have three maneuver battalions.)

The future available mix of BCTs is also affected by the re-missioning of eight BCTs (mostly HBCTs) to perform the SFA mission for training Iraqi forces. These Advise and Assist BCTs are trained and postured for their SFA role and could require some time to revert to a conventional combat role. For the purposes of this analysis, Advise and Assist BCTs are considered a short-term diversion that will not affect the future force structure issues addressed in the chapter.

The mix of BCTs is affected also by the number of BCTs and military strength constraints because the HBCTs are enough larger than the IBCTs to favor reducing the number of HBCTs. This issue will be addressed again in Chapter 12, which discusses how the Army can hedge against the occurrence of another MCO. Another point of reference that could affect the mix of BCTs is the utility of the combined arms battalions with M1 Tanks and M2 Bradley Fighting Vehicles for the kind of operations being conducted in Iraq and Afghanistan. Combined arms battalions reportedly worked well under some conditions in Iraq. There appears to be a general assumption that heavy

armored vehicles are unsuitable for operations in Afghanistan, but some units operating there are using mine resistant ambush protected (MRAP) vehicles to provide troop protection while moving around the theater and others are Stryker-equipped units. It would be useful to learn more about the experience of combined arms battalions in Iraq and Afghanistan.

C. The Third Battalion Issue

The Army decided to form BCTs with two maneuver battalions instead of three in order to satisfy the perceived need for 48 active BCTs to meet expected COCOM needs and comply with ARFORGEN rotations goals. However, that goal has already been abandoned, and the Army may be ready to consider converting some or all of its current BCTs to the three-battalion model. This section addresses the mix of BCTs and the number of maneuver battalions in an orderly manner to enable decisions on the optimum mix of BCTs and understand how adding a third maneuver battalion could affect the Army.

For the purposes of this analysis, the TOE strengths of these units are assumed to be as follows: IBCT, 3,453; HBCT, 3,774; and SBCT, 4,179.¹²⁷ These strengths have changed slightly since the BCTs were first introduced and the unit tables were revised, but the differences are relatively small.

1. Counting Rules

A key issue in the discussion of the merits of the third battalion is what to count when estimating combat potential.

A sub-issue is whether the RSTA Battalions in the BCTs are to be counted as equivalent to a maneuver battalion, assigned part credit as roughly a half of a maneuver battalion, or not counted as a maneuver battalion at all. The Army has taken the position that field commanders have used RSTA battalions habitually as maneuver battalions to “provide boots on the ground” in Iraq and Afghanistan, so they should be counted as a third maneuver battalion. This argument ignores that fact that fires battalions and other battalions have also been used as maneuver battalions to perform combat missions in these campaigns and might also be counted as maneuver battalions. The RSTA Battalion is about half the strength of the infantry battalion or combined arms battalion and is composed of small units lightly armed and equipped to perform reconnaissance operations. These battalions have usually required significant augmentation to assume the role of a maneuver battalion. Despite these reservations, the reconnaissance companies of

¹²⁷. Department of the Army, G-3 FM, 15 July 2009.

the RSTA battalions have been included in the count of combat companies as a concession to the Army’s argument.

In this analysis, the measure of combat potential is the number of maneuver companies rather than battalions. Even for this metric, the counting rules can be controversial. For example, the infantry battalion has three rifle companies and a weapons company whose role is to provide crew-served weapons and direct fire support for the rifle companies. In order to be inclusive, the rule used here is to count rifle companies, weapons companies, Stryker rifle companies, mechanized infantry companies, and tank companies as “maneuver companies.” Headquarters and headquarters companies of the maneuver battalions are not counted, even though some may have weapons support capabilities. The small anti-tank company of the SBCT is not counted. Engineer companies are not counted. Reconnaissance companies are counted as three per IBCT or HBCT and one per SBCT. Table 60 compares the number of maneuver companies and reconnaissance companies for the current and future mixes and the 2-battalion and 3-battalion alternatives. The Possible Future Mix results from conversion of 6 HBCTs to SBCTs. Table 61 shows how these results were calculated. RSTA battalions and reconnaissance companies are included in this count, but they are not considered in the subsequent analysis of alternatives because they do not affect the results significantly.

Table 60. Comparison of 2- and 3-Battalion BCTs for Current and Possible Future Mix

	Current BCT Mix		Possible Future BCT Mix	
	CASE A – 2-battalion BCTs	CASE C – If all were 3-battalion BCTs	CASE B – 2-battalion BCTs	CASE D – If all were 3-battalion BCTs
Number of BCTs	72	72	72	72
Maneuver Battalions	151	216	157	216
Maneuver Companies	604	864	628	864
Maneuver & RSTA Battalions	216	281	216	275
Maneuver & Recon Companies	806	1,068	818	1,054

Table 61. Derivation of Maneuver and Reconnaissance Companies

	Maneuver Companies per Battalion						Bns/ BCT	BCTs	Bns	Companies
	Rifle	Wpns	Stryker	Mech	Tank	Total				
CASE A – Current BCT Mix with 2-Battalion BCTs										
IBCTs	3	1				4	2	40	80	320
SBCTs		1	3			4	3	7	21	84
HBCTs				2	2	4	2	25	50	200
TOTALS								72	151	604
RSTAs							1		65	202
TOTALS									216	806
CASE B – Possible Future BCT Mix with 2-Battalion BCTs										
	Rifle	Wpns	Stryker	Mech	Tank	Total				
IBCTs	3	1				4	2	40	80	320
SBCTs		1	3			4	3	13	39	156
HBCTs				2	2	4	2	19	38	152
TOTALS								72	157	628
RSTAs							1		59	190
TOTALS									216	818
CASE C – Current Mix with 3-Battalion BCTs										
	Rifle	Wpns	Stryker	Mech	Tank	Total				
IBCTs	3	1				4	3	40	120	480
SBCTs		1	3			4	3	7	21	84
HBCTs				2	2	4	3	25	75	300
TOTALS								72	216	864
RSTAs							1		65	202
TOTALS									281	1,068
CASE D – Possible Future Mix with 3-Battalion BCTs										
	Rifle	Wpns	Stryker	Mech	Tank	Total				
IBCTs	3	1				4	3	40	120	480
SBCTs		1	3			4	3	13	39	156
HBCTs				2	2	4	3	19	57	228
TOTALS								72	216	864
RSTAs							1		59	190
TOTALS									275	1,054

The CASE C and CASE D force structures in Table 61 show the effects of providing three maneuver battalions for each of the 72 BCTs in the current and future force structures. The number of maneuver battalions increases from 216 to 281 for the current mix, a net increase of 65 battalions. For the possible future mix, the number of battalions increases from 216 to 275, a net increase of 59 battalions. However, these are

unconstrained numbers, and the Army cannot add third battalions to its BCTs without finding “bill-payers.” In this analysis, military personnel providing “overhead” or common support in a BCT are the bill payer for third battalions. When keeping the end strength constant, this process requires a reduction in the number of BCTs, but adds additional combat power.

2. The Third Battalion Package

Adding a third maneuver battalion to a two-battalion BCT requires adding not just another infantry battalion or combined arms battalion. It also requires adding a “slice” of CS and CSS units to provide sufficient enablers. The total increment of military personnel the IDA team calculated as needed to add a third battalion to a BCT is as shown in Table 62. This is a fully enabled package designed to replicate the current support for each maneuver battalion. It might be possible to reduce the strength of this package and end up with more BCTs. Substituting a HIMARs rocket battery for a cannon battery might save 30-50 spaces per BCT. Dropping the reconnaissance and engineer platoons in the package would also allow saving some BCTs.

Table 62. Total Incremental Personnel Package to Add a Third Maneuver Battalion

	IBCT	HBCT
Infantry Battalion	665	-
Combined Arms Battalion	-	700
Reconnaissance Platoon	70	70
Artillery Battery	94	115
Signal Platoon	23	23
MI HUMINT Team	4	4
Engineer Platoon	28	-
Forward Support Company	130	231
Medical Section	11	11
Total Maneuver Battalion Package	1,025	1,154

3. Comparison of Variations

The authorized military personnel strength for the BCTs in the possible future BCT mix structure is 264,153. (This figure is the sum of $40 \times 3,453 = 138,120$ for the IBCTs; $13 \times 4,179 = 54,327$ for the SBCTs; and $19 \times 3,774 = 70,756$ for the HBCTs.) This strength total is the assumed constraint on alternative mixes addressed below. The revised strengths of the IBCT and HBCT after adding a third maneuver battalion package and the existing SBCT are shown in Table 63.

Table 63. Personnel Authorizations for 3-Battalion BCTs

	Military Personnel Authorizations		
	2-battalion BCT	3 rd Battalion Package	3-battalion BCT
IBCT	3,453	1,025	4,478
SBCT			4,179
HBCT	3,774	1,154	4,928

Reassigning two maneuver battalions and the other elements of a BCT package from an IBCT and inactivating the remainder of an IBCT will free up 1,403 more personnel authorizations ($3,453 - (2 \times 1,025) = \mathbf{1,403}$) and for an HBCT, 1,466 authorizations ($3,774 - (2 \times 1,154) = \mathbf{1,466}$). These personnel can be used to staff additional maneuver battalions and associated support packages that will be needed to add a third battalion to all or some of the IBCTs and HBCTs.

Unless changes are made to the SBCT design, perhaps to make them more like the Modular BCTs, they will not affect these tradeoffs.

Another way to understand the trade-off is that re-assigning two maneuver battalions and inactivating remaining overhead frees up 3,453 personnel from each IBCT and 3,774 personnel from each HBCT. This corresponds to ~ 3.37 ($3,453/1,025 = \sim \mathbf{3.37}$) additional fully enabled infantry battalions for each IBCT deactivated and ~ 3.27 ($3,774/1,154 = \sim \mathbf{3.27}$) additional combined arms battalions for each HBCT deactivated.

The following analysis addresses several numbers and mixes of BCTs to get an idea of the number of 3-battalion BCTs that can be supported within the strength limitation of 264,153 personnel authorizations. The data in Table 64 show that if all IBCTs and HBCTs were converted to the 3-battalion version and SBCTs remained at 13, the Army could staff from 58 to about 60 BCTs, depending on the mix of IBCTs and HBCTs.

Table 64. Results of Changing the Number and Mix of a 3-Battalion BCT Force

Variation in Number & Mix				Military Personnel Authorizations				Limit	Shortfall
IBCTs	HBCTs	SBCTs	Total	IBCTs	HBCTs	SBCTs	Total	264,153	
40	19	13	72	179,120	93,632	54,327	327,079	264,153	-62,917
40	10	13	63	179,120	49,280	54,327	282,727	264,153	-18,564
35	12	13	60	156,730	59,136	54,327	270,193	264,153	-6,040
35	10	13	58	156,730	49,280	54,327	260,337	264,153	+3,816

It is also possible to vary the number and mix of BCTs so that some BCTs have three battalions and other BCTs have two. One variation would be to provide third battalions for IBCTs while leaving the HBCTs with two maneuver battalions. The idea would be to strengthen the IBCTs that need a large number of infantry soldiers to conduct

SOs. Table 65 shows the results of this variation and finds that feasibility is found at about 62 BCTs.

Table 65. Analysis of the Feasibility of Alternative Mixes of BCTs

Variation in Number & Mix				Military Personnel Authorizations				Limit	Shortfall
IBCTs w/3bns	HBCTs w/2bns	SBCTs w/3bns	Total	IBCTs	HBCTs	SBCTs	Total	264,153	
40	19	13	72	179,120	71,136	54,327	304,583	264,153	-40,430
35	16	13	64	156,730	59,904	54,327	270,961	264,153	-6,808
40	9	13	62	179,120	33,696	54,327	267,143	264,153	-2,990
35	14	13	62	156,730	52,416	54,327	263,473	264,153	+680

Up to this point, the analysis has dealt with the Total Army without differentiating between BCTs in the AC and BCTs in the ARNG. If the number of ARNG BCTs is held at 28, a reduction of total BCTs to 62 would result in an AC with 34 BCTs, which would be almost the same number of Active brigades as in the pre-Modular force. It is useful to consider what would happen to the AC BCTs if the current number and mix of ARNG BCTs is held constant or allowed to vary.

Table 66 shows the BCT mix by component for the Base Case, the unconstrained case, and three alternative mix cases.

Table 66. Results for Various Mixes of BCTs by Component

	IBCTs	HBCTs	SBCTs	Total	IBCTs	HBCTs	SBCTs	Total
CASE A. IBCTs and HBCTs have 2 maneuver battalions and SBCTs have 3 maneuver battalions								
AC	20	12	12	44	69,060	45,288	50,148	164,496
NG	20	7	1	28	69,060	26,418	4,179	99,657
CASE B. All BCTs have 3 maneuver battalions and strength is unconstrained								
AC	20	12	12	44	89,560	59,136	50,148	199,844
NG	20	7	1	28	89,560	34,496	4,179	128,235
CASE C. All BCTs have 3 maneuver battalions and strength is constrained to totals in Case A								
AC	17	8	12	37	76,126	39,424	50,148	165,698
NG	15	6	1	22	67,170	29,568	4,179	100,917
CASE D. IBCTs & SBCTs have 3 maneuver battalions and HBCTs have 2 maneuver battalions								
AC	19	8	12	39	85,082	30,328	50,148	165,558
NG	15	7	1	23	67,170	26,418	4,179	97,767
CASE E. AC BCTs have 3 maneuver battalions and NG BCTs have 2 maneuver battalions								
AC	17	8	12	37	76,126	39,424	50,148	165,700
NG	20	7	1	28	69,060	26,418	4,179	99,657

Case A shows the future 72 BCT mix with 2-battalion IBCTs and HBCTs. This is the Base Case, which sets the limiting strength for each component.

Case B shows the 72 BCT mix when all BCTs are converted to have 3 maneuver battalions and the number and mix of ARNG BCTs are not changed. This is an unconstrained case and would require an addition of $128,235 - 99,657 = 28,578$ personnel to the ARNG BCTs and 35,348 to the AC BCTs.

Case C shows a 59 BCT mix that almost complies with the strength limits in Part A. This mix would require the addition of 1,202 AC personnel and 1,260 NG personnel over the personnel limits in Part A.

Case D shows a 61 BCT mix, in which IBCTs and SBCTs have 3 battalions and HBCTs have 2 battalions. This mix might be rationalized on the basis that the IBCTs need to have more “boots on the ground” for Stability Operations.

Case E shows a 64 BCT mix, in which the AC BCTs have 3 battalions and NG BCTs have 2 battalions, leaving the NG total at 28.

The foregoing analyses indicate that the Army with all BCTs organized with 3 maneuver battalions would have 37–39 AC BCTs and 22–23 NG BCTs without taking personnel from other functions. (Mixes with both 3-battalion and 2-battalion BCTs would have a few more than that.) For the Active Army, this compares favorably with the pre-Modular AC force structure that had 32 AC brigades. ARNG combat capability has decreased, but this was not done because of the introduction of the Modular Force. With this mix, the AC could support 36 3-battalion BCTs in the Rotational Force, a number that can provide 12 AC brigades for each ARFORGEN cycle, and the ARNG could provide three or four 3-battalion BCTs for each ARFORGEN cycle.

The foregoing analysis deals with BCTs and maneuver battalions, but the actual payoff in increased combat potential is better measured by the number of maneuver companies in each alternative. Table 67 shows the maneuver battalions for the base case (Case A) and the three feasible constrained alternatives presented in Table 66 above. SBCTs have three maneuver battalions in each case. Case B is unconstrained and is not shown in Table 67.

Table 67. Impact of Constrained Cases

Constrained Alternatives	Case A. IBCTs w/2 Bns HBCTs w/2 Bns	Case C. All BCTs w/3 Bns	Case D.	Case E.
			IBCTs w/3-Bns, HBCTs w/2 Bns	AC w/3 Bns & NG w/2 Bns
Number of BCTs	72	59	62	65
Maneuver Battalions	157	177	171	168
Maneuver Companies	628	708	684	672

Each of the constrained cases provides a substantial increase in maneuver companies at no increase in the total number of military personnel assigned to BCTs. The additional maneuver battalions and their associated support packages are “paid for” from a human capital perspective by the BCT personnel freed up when BCTs are inactivated. Table 68 shows the calculations that support this tradeoff.

Table 68. Tradeoff Analysis for Creating Additional Maneuver Battalions

Case	2-Bn BCTs Inactivated		Personnel Freed Up by inactivating BCTs			New Bns w/support		Personnel Required for New Battalions			Difference
	IBCT	HBCT	IBCT	HBCTs	Total	Inf	CA	Inf	CA	Total	
C	8	5	27,624	18,870	46,494	32	14	32,800	16,156	48,956	-2,462
D	6	4	20,718	15,096	35,814	34		34,850		34,850	+964
E	3	4	10,359	15,096	25,455	17	8	17,425	9,232	26,657	-1,202

The results of this kind of analysis are dependent on the mix of BCTs and the necessity to balance that mix separately for each of the two components. For Case C, the difference is split evenly between the AC and the ARNG, making it difficult to simply reduce the number of BCTs to balance the personnel account.

The findings from IDA’s preliminary analysis indicate that if combat potential is measured in maneuver companies, it makes sense to have fewer BCTs, all of them with three maneuver battalions. The Army can do this by reallocating the personnel from BCTs that have been inactivated to form 20 additional maneuver battalions with 80 more maneuver companies. Other alternatives that have a mix of two-battalion and three-battalion BCTs also provide more maneuver battalions and companies but fail to provide uniformity in BCT structure.

D. Observations

1. Uniform BCT Designs

One of the Army’s goals with the Modular Force was to achieve uniformity among the brigades. This has not been achieved because the SBCTs remain in a three-battalion design and differ substantially from the IBCT and HBCTs in the way that combat support and combat service support is provided. As noted in Section I, the SBCT was more valued by field commanders because it did have three maneuver battalions and was organized to facilitate moving maneuver battalions from brigade to brigade. It is not clear at this time whether the six new SBCTs to be formed in the near future will be the original SBCT design or whether all SBCTs will at some point be converted to the Modular design. In 2008, it appeared that the Army was reverting to a uniform three-battalion brigade for a subset of BCTs when the Future Combat System (FCS) was

fielded. However, when the FCS program was cancelled, the proposed FCS brigades were dropped from the planned force structure.

The Army now should examine whether it will standardize on Modular two-battalion BCTs or on post-Modular three-battalion BCTs. The 3rd Armored Cavalry Regiment, a pre-Modular design that was very popular among some Army leaders, has been Modularized, losing one maneuver battalion.

Finally, it is possible that, based on experience in campaigns in Iraq and Afghanistan, the Army may elect to convert all BCTs to a design that makes it easiest to attach and detach maneuver battalions of different kinds to and from a BCT base designed for that role. This would mean abandonment of the fixed BCT model.

2. Two or Three Maneuver Battalions

Converting to the three-maneuver-battalion BCT would provide the Army significantly more combat companies than currently planned in the future program at little or no net cost in personnel. The additional combat companies are paid for by the personnel that are freed up when 2-battalion BCT units are inactivated. The quantitative gains of maneuver companies available are considerable, and the qualitative value in having a third maneuver battalion has been suggested by combat experience. The three-battalion model can be expected to cover 50% more territory than the two-battalion model, and it can more efficiently use combat support enablers and BCT overhead. Army leaders should consider seriously whether to have a smaller number of arguably more capable BCTs or continue to maintain a larger number of less capable BCTs with known shortcomings and limitations.

3. Designing the Army Force Structure

This chapter has addressed some of the changes that would result from converting some or all of the present BCTs from a two-maneuver-battalion design to a three-maneuver-battalion design. There are many variables to consider in analyzing the composition and mix of BCTs, and it has not been possible to establish a way to proceed other than by postulating illustrative cases and then examining their consequences. The existence of 13 SBCTs has been assumed and has been held constant during the analysis, but the Army may want to reconsider the number and design of these BCTs. The unit strength data used in these calculations was taken from official sources, but they may not reflect the currently approved strengths. There may be other facts or relationships that need to be modified or taken into account if this work is pursued further. Additional analysis can and should be done on this very important issue. In a possible period of reduced manpower authorizations, it may be useful to consider a four-maneuver-battalion BCT to optimize protection of existing combat potential and make better use of current and future enablers by reducing overhead even more.

10. Conducting Domestic Operations

A. Introduction

The purpose of this chapter is to address the conduct of the two categories of domestic operations: Homeland Defense Operations and Civil Support Operations. These are addressed separately from the other operational categories in the Spectrum of Operations because they take place in or adjacent to the United States. Many of the capabilities and resources required for the conduct of domestic operations are also required for the conduct of foreign operations. However, the laws, rules of engagement, and policies governing the conduct of domestic operations are different enough from those governing foreign operations to warrant separate treatment.

This chapter focuses on the Army's contribution to Homeland Defense and Civil Support. (Other elements of the Department of Defense, including the Navy, Air Force, and Marine Corps also play important parts in these domestic operations.) The Army's two reserve components have differing roles in the domestic context. The USAR is a federal reserve dedicated entirely to the support of the Active Army. The ARNG has a dual role as state troops under the command of the respective governors when not on federal active duty and as an augmentation to the Army when called up for federal active duty. For domestic operations, Guard units may be called to federal active duty (termed Title 10 status) or go on state active duty (termed Title 32 status). Depending on the nature of an operation, Guard units on state active duty may be paid from federal funds or state funds. In this chapter, the term "Army" refers to all three components, regardless of status.

Homeland Defense and Civil Support are separate, distinct operational categories, notwithstanding common use of the acronym "HD/CS", which implies a blending of them. The essential difference between HD and CS is who is in charge. Homeland Defense is a military operation commanded by the President as Commander-in-Chief and the Secretary of Defense. DOD is in charge, and other federal agencies support DOD for Homeland Defense purposes. For Civil Support operations, DOD supports the Department of Homeland Security, the Department of Justice, or another federal agency, depending on the circumstances.

B. Homeland Defense Operations

This section examines the Army's role in Homeland Defense (HD) and assesses the implications of that role for the Army's force structure. HD Operations are defined as:

Operations [that] help ensure the integrity and security of the homeland by detecting, deterring, preventing, or if necessary, defeating threats and aggression against the United States as early and as far from its borders as possible so as to minimize their effects on U.S. society and interests.¹²⁸

In this analysis, HD Operations are limited to domestic operations conducted in the United States or adjacent land, air, and maritime areas. It is true that destroying or disrupting a terrorist group in Afghanistan contributes to Homeland Security in the United States, but that truth has little force structure significance and tends to diminish attention on what also needs to be done close to home.

1. Overview of Homeland Defense Operations

HD Operations are commanded by the President, Secretary of Defense, and the Commanders of the U.S. Northern Command (NORTHCOM), U.S. Pacific Command (PACOM), U.S. Strategic Command (STRATCOM), and U.S. Special Operations Command (SOCOM), each within an assigned function or area of responsibility. NORTHCOM is responsible for the Continental U.S., Alaska, Puerto Rico, and the U.S. Virgin Islands. The commander of NORTHCOM is also the commander of the North American Air Defense Command (NORAD), which is a combined headquarters with Canada. PACOM is responsible for Hawaii and the Pacific territories. SOCOM and STRATCOM each have global areas of responsibility. The five domains of HD Operations are missile, cyber, aerospace, maritime, and land, as shown in Table 69. The responsible combatant commands are also indicated in the table.

¹²⁸. Department of Defense, Quadrennial Roles and Missions Report, January 2009, 5. Army Field Manual 3-0, February 2008, does not list Homeland Security in its Glossary.

Table 69. Sub-Categories of, and Responsibilities for, Homeland Defense Operations¹²⁹

Missile Defense	Defend the U.S. against ballistic missile attack and participate in space operations (STRATCOM)
Aerospace Defense	Detect, intercept, and if necessary destroy hostile aircraft approaching or within U.S. airspace (NORAD)
Maritime Defense	Detect, intercept and if necessary destroy hostile vessels approaching the U.S. by sea or in US waters (NORTHCOM)
Cyber Defense	Detect and deflect cyber attacks on DOD and U.S. systems (STRATCOM)
Land Defense	Defend U.S. borders and defeat attacks on the U.S. by hostile land forces (NORTHCOM)

Aerospace Defense Operations and Maritime Defense Operations involve performing surveillance of the global commons and the approaches to U.S. borders and detecting, interdicting, and, if necessary, destroying hostile aircraft and vessels approaching the U.S. This includes destruction of hostile missiles with conventional or chemical, biological, radiological, nuclear, or high-yield explosive (CBRNE) warheads launched from other countries or from aircraft or vessels against targets in the U.S. Army headquarters and units conduct land-based anti-ballistic missile operations and land defense operations. The Air Force units conduct Aerospace Defense Operations and Navy units conduct Maritime Defense Operations. The Navy units also conduct anti-ballistic missile operations from ships. Cyber defense is the responsibility of STRATCOM, and other DOD components, including the Army, participate in that mission area.

DHS also conducts operations that contribute to the defense of the U.S. The U.S. Coast Guard has a role in maritime security and works closely with the Navy to perform this mission. Customs and Border Protection is responsible for securing the borders.

2. Ballistic Missile Defense Operations

Missile defense is a limited, well-defined mission that is supported by dedicated Army units and personnel. The U.S. Army Space and Missile Defense Command (USASMD) is in charge of all Army space and missile defense activities and operations. This command also functions as Army Forces Strategic Command, the Army service component command of STRATCOM. The main headquarters of the Army Space and Missile Defense Command (SMDC) is at Redstone Arsenal, AL. There is also a forward headquarters at Peterson AFB, CO. SMDC is an integrated military command staffed by AC and ARNG military personnel and civilian employees. There are no current force structure issues with this specialized Army mission. Decisions on the Ballistic Missile

¹²⁹. There are some differences among the various doctrinal publications on how to organize Homeland Defense into sub-categories. Joint Publication 3-27 has four mission areas—air, space, maritime, and land—with three additional areas for consideration: information, critical infrastructure, and combating WMD. A draft Joint Operating Concept for HD/CS identifies four mission areas—air & space, maritime, land, and cyber.

Defense Program determine the size of this program, and about 1,000 Army military and civilian personnel are currently assigned to this command. Any Army personnel increase in this mission area must be offset with decreases in other mission areas. USASMDC includes the following elements:

- Space and Missile Defense Technical Center
- Space and Missile Defense Battle Lab
- Space and Missile Defense Acquisition Center, Huntsville, AL
- High Energy Test Systems Test Facility, White Sands Missile Range, NM
- U.S. Army Kwajalein Atoll Test Site, Republic of the Marshall Islands
- Joint Land Attack Cruise Missile Defense Elevated Net Sensors Project Office, Huntsville, AL
- Ballistic Missile Targets Joint Project Office, Huntsville
 - 1st Space Brigade, Peterson AFB, Colorado
 - 1st Space Battalion
 - 117th Space Battalion, Colorado ARNG
 - 53rd Signal Battalion (SATCON)
 - U.S. Army NASA Detachment (for Army Astronauts)
 - 100th Missile Defense Brigade, Peterson AFB, Colorado
 - 49th Missile Defense Battalion, Alaska ARNG, Fort Greeley, AK

3. Land Defense Operations

It is the Army's responsibility to provide units and trained individuals to conduct land operations to defend the U.S. While there is little likelihood of a major land invasion, there is the possibility that the Army will be called upon to secure the U.S. borders and/or repel cross-border raids or incursions. There is also the possibility that terrorists may attempt to launch a missile or rocket attack on the U.S. from a nearby country. This would require NORTHCOM, PACOM, or SOCOM to conduct a raid or strike to prevent such an attack or destroy the hostile forces after an attack. Land Defense Operations would be conducted by SOF or Army GPF, including AC and USAR elements, and ARNG elements on federal active duty.

In the absence of a major threat, Land Defense Operations appear to be a low priority, but there are still some important considerations. NORTHCOM or PACOM could be called on to eliminate terrorists or insurgents intent upon attacking the U.S. from adjacent nations, to improve the security of U.S. borders, or even to detect and or destroy terrorists inside the U.S. In these cases, NORTHCOM and PACOM would have to be able to respond rapidly using existing units and capabilities.

Much of the doctrinal discussion of land defense is conducted under the heading of Combating Terrorism, which is defined by the Army as including both offensive

(counterterrorism) and defensive (antiterrorism) measures. These operations have one fuzzy boundary between Homeland Defense and Civil Support and another between SOF and GPF.

Counterterrorism. The role of the Army in domestic counterterrorism depends on the place from which an attack is launched. The Army Field Manual defines counterterrorism as follows:

...operations that include the offensive measures taken to prevent, deter, preempt, and respond to terrorism. [They] include strikes and raids against terrorist organizations and facilities outside the United States and its territories. Although counterterrorism is a specialized mission for selected special operations forces, conventional Army forces may also contribute. Commands who employ conventional forces against terrorists are conducting offensive operations, not counterterrorism operations.¹³⁰

If terrorists were to launch an attack from outside the NORTHCOM or PACOM areas of responsibility, the COCOM would try to prevent or preempt that attack under military command as a Homeland Defense Operation. If terrorists entered the U.S. and launched an attack from within the U.S. borders, the NORTHCOM and PACOM response would be considered a Civil Support Operation. Another complicating factor is the difference between SOF and GPF, which is highlighted in the last sentence of the definition. This sentence changes the name (but not the nature) of a Homeland Defense Operation based on which combatant command is conducting it. From an operational viewpoint, these domestic operations could be carried out by either SOF or GPF.

Antiterrorism. While antiterrorism operations are mostly defensive, they may, in some instances, involve offensive tactical responses. The Army defines antiterrorism as:

defensive measures used to reduce the vulnerability of individuals and property to terrorist acts, to include limited response and containment by local military and civilian forces. It is a protection task.¹³¹

The difficulty with this doctrine is that it is not clear whether protecting a military facility is to be performed by the Department of the Army as a Homeland Defense Operation or by NORTHCOM as a Civil Support mission under the National Infrastructure Protection Plan. Again, the key is whether the attack occurs within or outside the U.S. For the purposes of this paper, Homeland Defense Operations deal with threats and attacks against the U.S. that are launched from outside the U.S. and Civil Support Operations as those dealing with threats and attacks that are launched inside the U.S. Table 70 offers comments on potential Land Defense Operations using this distinction.

¹³⁰. Department of the Army Field Manual 3-0, "Operations," February 2008, 2-12.

¹³¹. Ibid.

Table 70. Land Defense Operations

Operation	Comments
Surveillance and Detection	As part of a joint force, conduct surveillance on areas in the land approaches to the U.S. and detect threats
Raids	As part of a joint force, conduct raids into land areas in the approaches to disrupt and/or destroy terrorists or hostile forces attempting to or conducting attacks on the U.S.
Strikes	As part of a joint force, conduct strikes using artillery or missiles to disrupt and destroy terrorists or hostile forces attempting to or conducting attacks on the U.S.
Border Security	Conduct military operations to defeat terrorists or hostile military or paramilitary forces invading the U.S.

Border Security Operations are also complicated by a fuzzy boundary between Homeland Defense and Civil Support Operations. If the mission is to augment or reinforce DHS elements securing the border, DOD elements would be performing a Civil Support Operation. If the hostile act is of sufficient magnitude to warrant a major response, DOD elements could engage in defensive and/or offensive operations to repel the attacks or incursions. In order to conduct these Homeland Defense Operations, NORTHCOM must be able to respond quickly with appropriate capabilities to destroy hostile forces before they can attack or if not, to destroy them as soon as possible to prevent follow-on attacks. It is also important to attribute the sources of attacks so that appropriate actions can be taken to deter or prevent future attacks.

The Army currently maintains a Global Response Force composed of a BCT that is prepared to deploy worldwide within 18 hours for a no-notice operation. This mission traditionally has been assigned to the 82nd Airborne Division. The Global Response Force can either conduct an LIO, such as a raid, or be the lead element of an MCO by conducting a force-entry operation to enable the insertion of follow-on forces.¹³²

It is possible that DOD forces can and will be used to deal with some attacks originating inside the United States.

4. Observations on Homeland Defense

It is worth considering forming a JTF assigned to NORTHCOM to provide a rapid response capability for domestic operations. This Domestic Response Force could conduct Land Defense Operations or be the lead element in response to a catastrophic emergency. It would operate in the event of natural disasters as well as terrorist attacks. Assignment to NORTHCOM would expedite deployment and allow responding forces to

¹³². Miles, Donna, 82nd Airborne Trains to Re-assume Global Response Force Mission, American Forces Press Services, <http://www.defenselink.mil/news/newsarticle.aspx?id=51684>, 28 October 2009.

receive specialized training for domestic operations, including civil disturbance training. This JTF could be formed around an IBCT with appropriate supporting elements, including both Army Aviation and Air Force transport elements. It would also be worthwhile to consider and decide ahead of time how or whether SOCOM might involve their SOF units.

There are no direct force structure implications in providing forces for this category of operations. They can be conducted by GPF already in the Army's force structure. Assigning to NORTHCOM some AC, ARNG, or USAR units that are in the ready stage of their ARFORGEN cycles would provide a robust capability to respond to major or catastrophic emergencies. These ready reaction elements would be trained for Homeland Defense Operations that require conducting strikes or raids on targets in the NORTHCOM or PACOM areas of responsibility.

C. Overview of Civil Support Operations

The purpose of this section is to assess the current Army posture to provide civil support, particularly for managing the consequences of catastrophic emergencies, and examine alternatives to improve the effectiveness of that posture. The basic description of this set of operations in the Army Field manual is as follows:¹³³

Department of Defense support to U.S. civil authorities for domestic emergencies, and for designated law enforcement and other activities.

A more comprehensive definition in the Strategy for Homeland Defense and Civil Support offers the following:¹³⁴

Defense Support of Civil Authorities, often referred to as Civil Support, is DoD support, including Federal military forces, the Department's career civilian and contractor personnel, and DoD agencies and component assets, for domestic emergencies and for designated law enforcement and other activities. The Department of Defense provides defense support of civil authorities when directed to do so by the President or Secretary of Defense.

The Army currently designates Civil Support as one of the four elements of Full-Spectrum Operations (along with Offensive Operations, Defensive Operations, and Stability Operations). It says that the primary tasks of Civil Support operations are to "provide support in response to disaster or terrorist attack, support civil law enforcement, [and] provide other support as required."¹³⁵ Civil Support also includes:

¹³³. Department of the Army Field Manual 3-0, "Operations," February 2008, paragraph 3-36.

¹³⁴. Department of Defense, Strategy for Homeland Defense and Civil Support, 2005, 5-6.

¹³⁵. FM 3-0, paragraph 3-36.

operations that address the consequences of natural or man-made disasters, accidents, terrorist attacks, and incidents in the United State and its territories. Army forces conduct civil support operations when the size and scope of events exceed the capabilities or capacities of domestic civilian agencies.”¹³⁶

When viewed in totality, the Army provides considerable support to other federal agencies and to state and local government. This support ranges from routine ongoing operations to immediate responses to catastrophic emergencies. Providing civil support is a significant demand on Army resources.

Organization of Civil Support Operations. The command structure for Civil Support Operations is generally the same as for Homeland Defense Operations. NORTHCOM is responsible for support provided in the Continental U.S., Alaska, Puerto Rico, and the U.S. Virgin Islands. PACOM is responsible for civil support provided in Hawaii and the Pacific Territories. SOCOM may also provide some support as described below. The Army land component command for Civil Support is ARNORTH (5th Army) headquartered in San Antonio, Texas. The U.S. Army Corps of Engineers (USACE) is also involved in providing civil support under the National Response Framework (NRF).

Table 71 provides definitions of the Army sub-categories of Civil Support Operations that will be discussed in the subsequent paragraphs.¹³⁷

Table 71. Sub-Categories of Civil Support Operations

Category	Description
Periodic Planned Support	Support to other federal agencies and state and local governments routinely provided on an agreed basis to enhance civil-military relations and provide immediate assistance in response to time-urgent requests for assistance in dealing with minor emergencies
Special Events	Support conduct of national special security events, such as the Olympics, Super Bowl, Inaugurations, and other events, such as a Boy Scout Jamboree or the World Series
Restore Public Health and Services and Civil Order	Conduct civil disturbance operations and other actions as directed by the President, to include border security, animal disease control, critical infrastructure protection, and other disruptive events
Disasters and Declared Emergencies	Support DHS by participating in response operations for natural disasters and attacks as specified in the NRF

¹³⁶. Ibid., paragraph 3–99.

¹³⁷. Department of the Army, How the Army Runs, Chapter 22, Defense Support of Civil Authorities, December 2008, 469–471.

1. Periodic Planned Support Operations

This civil support category includes numerous instances where DOD personnel and resources assist local and state authorities, the private sector, and other federal agencies in a variety of ways. These include but are not limited to the following:

- Participation in parades, ceremonies, displays, and other community relations programs
- Provision of emergency safety and traffic assistance to local authorities
- Participation in emergency management exercises
- Provision of military bands and color guards at events
- Protection of foreign officials and distinguished visitors in support of the U.S. Secret Service

2. Special Events

The Army provides security, communications, aviation, logistical, explosive ordnance disposal (EOD), medical, and other support for four kinds of special events. The amount and nature of the support depends on the situation. DOD may be reimbursed entirely or partially for costs incurred. This kind of Civil Support is provided by existing elements and there are no force structure implications.

- National Security Special Events (NSSE). Events of national significance, such as inaugurations, political conventions, state funerals, and major sporting events (e.g., the Olympics) present tempting targets for terrorists. When designated an NSSE by the Secretary of Homeland Security, the Army, along with other elements of DOD, provides support in accordance with a detailed security plan prepared in advance by the agency in charge—the Secret Service, Department of Justice, or other as appropriate. Those responsible for planning, preparing, and conducting these operations have the advantage of knowing well in advance that a particular event will take place on a certain date.
- Other Special Events. Events of less than national significance may be supported by the Army when the events are designated as special events by a DHS working group.
- International Sporting Competitions. Sports events of less than national significance may be supported by the Army when authorized by the Attorney General. The costs of this kind of support are paid from a revolving fund established by Congress.
- State Designated Special Events. ARNG elements acting under state control may provide support to events sponsored by the states.

3. Restore Public Health and Services Operations

To restore public health and services, DOD provides support to civil authorities in the five categories discussed below in order of magnitude. Army units and personnel may also be involved in the operations listed below.

Contingent Support. DOD may provide support for specific purposes, such as:

- **Postal Service**—In the event of a work stoppage or other event that disrupts mail service, DOD may provide support to the United States Postal Service to carry the mail.
- **Animal or Plant Disease Eradication**—DOD can assist the U.S. Department of Agriculture in emergencies requiring eradication or containment of plant and animal diseases.
- **Health and Medical Support**—When local medical care providers need help, DOD provides the kind of support set forth in the NRF, Emergency Support Function (ESF) #8.
- **Oil and Hazardous Substance Spills**—DOD can support the Environmental Protection Agency and U.S. Coast Guard in the event of this kind of emergency.
- **Wildfires**—DOD provides support to the National Interagency Fire Center in the event of fires on federally owned lands.
- **Mass Immigration Emergencies**—DOD can provide support to DHS in situations requiring housing and support of migrants.

Domestic Counter-Drug Operations. Public Law 97-86, 1987, authorizes the Army to provide indirect support to domestic drug interdiction and counter-drug activities. DOD supports Drug Enforcement agencies through a variety of operations and facilities.¹³⁸ DOD manages this support through the JTF-North at Fort Bliss, Texas, which is a subordinate command to NORTHCOM. This support includes ground reconnaissance, detection monitoring, communications, aerial reconnaissance, counter-drug related training, non-herbicidal cannabis eradication, linguist support, aerial and ground transportation, intelligence analysis, tunnel detection, engineering support, maintenance support, facilities, equipment loans, and military training and attendance at DOD and Army schools. The Army has about 200 personnel supporting this program.

Combating Terrorism. Although civil law enforcement agencies are responsible for combating terrorism in the U.S., the DOD may be called upon to provide specialized support. The Department of Justice (DOJ) is in charge overall and the Federal Bureau of Investigation (FBI) is the action agency for disrupting and preventing attacks, managing incidents, and investigating associated crimes. When the DOJ requests support, the DOD assesses the situation and, if possible, presents the issue to the President for approval. The

¹³⁸. How the Army Runs, 465.

President may authorize military troops to use lethal force when enforcing the laws in these operations. The support operation proceeds as follows:

Normally, DoD provides a JSOTF and special mission units (SMU) with unique capabilities, such as those to render safe WMD. The JSOTF deploys to the site and coordinates proposed actions with the FBI SAC [Special Agent in Charge]. At the appropriate time, the FBI employs the JSOTF to execute those operations approved by the President. DoD assets deployed in support of law enforcement operations do not normally remain to support response and recovery.¹³⁹

The designation of SOF to perform this mission does not rule out the use of GPF or other arrangements, such as NORTHCOM's JTF-Civil Support, to conduct these operations.

Civil Disturbance Operations. When authorized by the President, federal forces may be used to suppress insurrections, rebellions, and domestic violence.¹⁴⁰ The Attorney General is responsible for coordinating the federal response to domestic civil disorders. NORTHCOM CONPLAN 2502 (Civil Disturbance Operations) is the basis for the conduct of these operations in support of state and local authorities. If ordered to support a civil disturbance operation, DOD will establish a JTF to command DOD elements involved in the operation. Tasks to be performed may include joint patrolling with civilian police; securing key buildings, memorials, intersections, and bridges; and acting as a quick reaction force. It is not clear that current provisions for civil disturbance operations apply to civil disturbances arising from a catastrophic incident addressed as part of a response operation.

4. Disasters and Declared Emergencies

The Army is responsible for providing NORTHCOM and PACOM with units and individuals to support DHS and/or other civil authorities in managing the consequences of emergencies as provided in the NRF. This kind of Civil Support is the most demanding and, in the current threat environment, the most important.

5. Conduct of Response Operations

Under the current doctrine, response operations will be conducted in a bottom-up manner with three tiers: local, state, and federal. The Army (and DOD) approach is as follows:

Primary responsibility for responding to domestic disasters and emergencies rests with the lowest level of government able to effectively

¹³⁹ Ibid.

¹⁴⁰ Ibid., 485.

deal with the incident. If a situation exceeds local capabilities, local authorities are generally expected to seek assistance from neighboring jurisdictions under a mutual aid agreement before requesting state assistance. Similarly, if a state's capability proves insufficient, state authorities ask for assistance, to include non-federalized National Guard, from other states under existing agreements and compacts before requesting federal assistance. In the event of a very large or catastrophic event, federal aid may be provided while mutual aid agreements and compacts are still being coordinated. Defense resources are provided when circumstances warrant; military forces can be provided at state (National Guard forces under state control) and federal level.¹⁴¹

In the tiered response, DOD resources are made available on a “pull” system in which another department must ask for help. The major steps in the process are as follows:¹⁴²

- The process is initiated when a federal agency or another civil jurisdiction submits a Request for Assistance (RFA) to the Executive Secretary (ExSec) of DOD.
- “The ExSec assesses and processes the request by sending it simultaneously to ASD(HD & ASA) and the Joint Staff, Joint Director of Military Support (JDOMS).”
- “Under the principle of civilian control, the Executive Agent (Office of the Secretary of Defense) approves the order while the Action Agent (Joint Staff) coordinates with the appropriate Combatant Commander and prepares and processes appropriate orders.”
- “Once the Executive Agent approves the order, JDOMS issues an executive order designating the supported Combatant Command to execute DSCA...Before acting on a request for DOD support, consideration is given to the operational, legal, and policy aspects of the response. Operational review ensures that providing support will not unduly impact operational readiness; legal review ensures DOD support is consistent with regulatory guidance and approved by the appropriate authorities; and policy review ensures that such support is in the best interest of DOD.”
- Each RFA is assessed against six criteria: legality (compliance with laws); lethality (potential use by or against DOD forces), risk (safety of DOD forces), cost, appropriateness (including impact if request is denied), and readiness.
- Once the initial request has been approved, a Defense Coordinating Officer (DCO) is deployed to process specific requests.

¹⁴¹. Ibid., 471–472.

¹⁴². Ibid., 480–482.

- “If local and state resources, to include those available through mutual aid agreements and compacts, are insufficient, the State Coordinating Officer will pass a request for assistance to Federal Emergency Management Agency’s (FEMA) Federal Coordinating Officer (FCO).”
- “The Federal Coordinating Officer will validate the requirement and query the Joint Field Office ESFs to determine whether support is available. If not, he may pass the request to the Defense Coordinating Officer (DCO).”
- “If the DCO validates the requirement and can fill it with capability already deployed, then he will do so. If he validates the requirement but cannot meet it with capabilities already deployed, then he forwards the RFA through his reporting channels to NORTHCOM who in turn sends it to JDOMS for processing and approval similar to the process for the initial request.”¹⁴³

It is also possible for local authorities to obtain DOD assistance for minor, short-lived emergencies through the use of the Immediate Response Policy. This method allows commanders to respond immediately to conditions that are beyond the capability of local authorities without requesting prior approval. A commander who uses this authority must inform the Executive Agent through channels as soon as possible.

6. Chemical, Biological, Radiological, Nuclear and High-Yield Explosive (CBRNE) Response

One of the major concerns for the Army is responding to an attack or accident involving CBRNE. This effort is focused largely on protecting military personnel and facilities, as noted below:

It is the policy of the Department [of Defense] to protect personnel on military installations and DoD-owned or leased facilities from CBRNE attacks, to respond to these attacks with trained and equipped emergency responders, and to ensure installations are able to continue critical operations during an attack and to resume essential operations after an attack.¹⁴⁴

In this and in other aspects of force protection, critical infrastructure protection, and anti-terrorism, it is DOD’s responsibility to protect itself and to manage the consequences for Army facilities and personnel. At the same time, DOD may also receive requests to provide support to civil authorities, and it has established some capabilities to perform this mission.

^{143.} Ibid., 481.

^{144.} Wolfowitz, Paul, Deputy Secretary of Defense, Memorandum: Preparedness of U.S. Military Installations and Facilities Worldwide Against Chemical, Biological, Radiological, Nuclear and High-Yield Explosive (CBRNE) Attacks, 5 September 2002.

DOD has significant capabilities for participation in domestic consequence management operations. The command arrangements are as follows:¹⁴⁵

- U.S. Northern Command is responsible for conducting response operations in the 48 contiguous states, Alaska, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. The Army component command for Northern Command is the 5th Army, headquartered at Fort Sam Houston, Texas.
- U.S. Pacific Command is responsible for conducting response operations in Hawaii and the Pacific Island Territories. JTF–Homeland Defense is the planning and operational headquarters for civil support in PACOM. The Army component command for Pacific Command is U.S. Army Pacific headquarters in Hawaii.

7. Army Capabilities for Response Operations

The Army, the National Guard, and the other Military Services maintain some capabilities to respond to emergencies. The units and personnel providing these capabilities fall into three general categories according to their availability:

- **Dedicated** units are staffed with specially trained personnel, equipped with specialized equipment, and rehearsed in their consequence management duties. They are capable of an immediate response upon receiving an alert. They are not to be deployed for overseas military operations or, in the case of reserve component units, mobilized for federal active duty to participate in overseas military operations.
- **Dual-Use** units are maintained in the force structure to conduct foreign military operations but may also participate in domestic consequence management operations if available. They have to be ready for both missions. This is difficult and may result in situations in which dual-use units are not sufficiently prepared to perform either mission well.
- **Temporary-Use** units may be of almost any type and can be drawn largely from GPF, such as Army BCTs, combat support units, and combat service support units. Marine Corps units can provide security and perform common tasks. Air Force units can provide air transportation and base support capabilities. The Navy can position ships and use its shore bases to provide command and control capabilities and perform common tasks. All Services can provide helicopters for search and rescue and many other capabilities needed for response operations. The duration of a response operation typically is short—a few days or a few weeks at the most. Once the response phase has ended and the victims are safe

¹⁴⁵ Lystra, Clark R., Defense Support of Civil Authorities, Report, June 2007.

and receiving care, many of the temporary-use units can be released to return to their primary duties.

8. Army and DOD Civil Support Units

DOD has taken steps in recent years to improve its capability to provide civil support for emergency response operations, particularly for CBRNE attacks. These elements are discussed below.

NORTHCOM provides the following joint headquarters to conduct domestic operations.

- Standing Joint Force Headquarters North (SJTF-N) is a deployable headquarters under NORTHCOM that maintains situational awareness of the area of operations in order to assume operational command of the DOD elements involved in the conduct of response operations.
- Joint Task Force Alaska (JTF-A) coordinates the defense of Alaska and provides civil support in Alaska.
- Joint Force Headquarters National Capital Region (JFHQ-NCR) provides civil support in the National Capital Region. In the event of an emergency operation, this element would become JTF-NCR and command DOD forces in the NCR.
- Joint Task Force North (JTF-N) provides support to federal law enforcement agencies engaged in counter-narcotics operations.
- Joint Task Force-Civil Support (JTF-CS) plans and integrates the provision of civil support for CBRNE incidents and would command DOD elements in a response operation.

Joint Task Force-CS is a very important element in the provision of civil support in the event of a terrorist attack using CBRNE weapons.¹⁴⁶ By law, JTF-CS can respond only to a CBRNE attack and cannot respond to a natural disaster or an accident, even one involving a toxic industrial chemical agent (which is why the JTF-CS did not participate in the response to Hurricane Katrina.) JTF-CS is located at Fort Monroe in Hampton, VA but is scheduled to move to Fort Eustis as part of the base realignment and closure (BRAC) process. The JTF and its subordinate elements will not “have to carry guns during a domestic operation because they will not be authorized to enforce the law.”¹⁴⁷ The JTF headquarters consists of about 400 personnel.

¹⁴⁶. This account is based on a presentation by Captain M. A. Collins, USN, Chief of Staff, at the Defense 2009 Symposium, 12 March 2009.

¹⁴⁷. Ibid.

One of the functions of the JTF-CS is to establish a logistical support base for DOD elements participating in a CBRNE response operation.¹⁴⁸ This is difficult because DOD is not allowed to budget for or fund Civil Support Operations. JTF-CS and ARNORTH should work together to ensure logistical support for the operation. The 167th Sustainment Command, USAR, has been placed in charge of logistical support by ARNORTH. Since DOD's assumption is that there will be few or no civil resources available, and that DOD will have to provide all of the necessary support, contracting for supplies would be very important. The creation of a Theater Property Book to account for materiel set aside for these operations is under consideration.

The CBRNE Consequence Management Response Force (CCMRF) is a joint organization of about 5,000 military personnel trained and equipped to conduct domestic operations in response to a CBRNE incident.¹⁴⁹ There is only one CCMRF at this time. The Army plans to form two more CCMRFs by FY 2011, in the ARNG.¹⁵⁰

The existing CCMRF is a provisional organization composed of the following elements: Task Force Operations, Task Force Medical, Task Force Aviation, the Marine Corps Chem-Bio Incident Response Force, a USAR Chemical Company, an ARNG Truck company, and an Air Force Civil Engineering Squadron. Task Force Operations is composed of a BCT in the reset phase of its ARFORGEN schedule that will have the CCMRF mission for a year, before another AC BCT is designated. The BCT training program includes mission essential tasks for both domestic response operations and full-spectrum operations. The BCT is equipped with vehicles suitable for Civil Support operations as necessary.

As the Army component command for NORTHCOM, Headquarters 5th Army is the primary operational planner for emergency response operations. The staff is dedicated to this mission and is engaged with other elements that could be involved. ARNORTH is the proponent for two important civil support programs: Defense Coordinating Officers (DCO) and Emergency Response Liaison Officers (EPLO).

DCOs represent DOD as the single point of contact at a Joint Field Office with respect to all but one of the 15 ESFs in the NRF during response operations. (The exception is ESF #3, Public Works and Engineering, which is explained below.) ARNORTH manages this program, which trains and assigns Army colonels to be DCOs on behalf of NORTHCOM. There are DCOs at each of the 10 FEMA regions, Hawaii, and Guam ready to coordinate the DOD response to declared disasters and other emergencies for which DOD support has been approved. Each DCO is supported by a

¹⁴⁸. Hearn, Colonel Steven, USA, J4 JTF-CS, presentation at the Defense 2009 Symposium, 22 March 2009.

¹⁴⁹. Collins, Captain, 22 March 2009.

¹⁵⁰. Hess, COL Dean W., War Plans Division, Department of the Army Staff, G3/5/7, 22 May 2009.

staff of four or five personnel to coordinate operations, planning, logistics, and communications support.¹⁵¹

EPLOs provide links between the DCOs and the state, local, and tribal governments involved in a response operation. Each state, territory, and FEMA region has Army, Navy, Marine, and Air Force Reserve field grade officers who are trained in disaster preparedness and Civil Support Operations. These officers are on inactive duty but may be called to active duty when participating in a response operation. There are about 1,000 EPLOs at this time.

ARNORTH also has two joint task force headquarters that can be assembled and deployed to command Army elements in response operations.

When required, the Army can also assign additional specialized units to participate in response operations. These include the 20th Support Command, which has about 5,000 soldiers and is commanded by a major general. The 20th Support Command includes a chemical brigade with four battalions and 24 companies, and two Ordnance Groups with seven battalions, each of which has several EOD companies with numerous detachments. The EOD detachments are dispersed to permit rapid response to calls for this kind of service. This organization is maintained for foreign operations but some of its units can also be used for domestic operations. Some of the chemical units have two sets of equipment: one for battlefield operations and the other for domestic operations. The 20th Support Command has significant specialized capabilities that can be used for domestic or foreign operations, depending on the circumstances.

9. National Guard Civil Support Organizations

The ARNG provides four different kinds of organizations for domestic operations.

Joint Task Force–State (JTF-S). When ARNG elements are deployed to support civil authorities, this headquarters commands all state military elements.¹⁵² They provide a link between the deployed units and the state military headquarters. This would apply to the full range of emergencies for which civil support can be provided.

Weapons of Mass Destruction-Civil Support Teams (WMD-CST). These teams support state governments dealing with CBRNE incidents. There are 55 CSTs: one in each state, the District of Columbia, the U.S. Virgin Islands, with additional teams in Texas, California, and New York. Each CST is commanded by a lieutenant colonel and has 22 full-time personnel from both the Air and Army National Guard. DOD funds the cost of staffing, training, equipping, and sustaining the teams. They are intended to

¹⁵¹. Lystra, 39.

¹⁵². The National Guard's Role in Homeland Defense,
<http://www.ng.mil/features/HomelandDefense/jtf/factsheet.html>, 9 April 2009.

operate under state control and may be available to other states as indicated by the situation. Each CST is equipped with personal protective clothing, a full set of sensors, a satellite communications suite, and vehicles for 100% mobility. Their mission is to “support civil authorities at a domestic CBRNE incident site by identifying CBRNE agents/substances, assisting with current and projected consequences, offering advice on response measures, and assisting with appropriate requests for additional state support.” By law, the WMD-CSTs may not deploy outside the U.S. in Title 32 status.¹⁵³

National Guard CBRNE Emergency Response Force Packages (CERFP). The mission of the CERFP is to “provide immediate response capability to the governor, including incident site search capability of damaged buildings, rescuing trapped casualties, providing decontamination, and performing medical triage and initial treatment to stabilize patients for transport to medical facilities.” There are 17 CERFPs in existence at this time. Each CERFP has about 186 troops.¹⁵⁴

National Guard Reaction Forces (NGRF). These forces provide force protection for the CERFPs and other state elements involved in response operations. Each NGRF has about 400 personnel and is positioned to provide a lead element of 50-75 personnel within 4-8 hours and the remaining within 24-36 hours. There is an NGRF in each state.

10. Summary of Army Specialized Civil Support Organizations

Army specialized elements currently available for Civil Support Operations are shown in Table 72.¹⁵⁵ This display does not include any GPF that might be called upon to augment the specialized elements in a major or catastrophic emergency. About 54,000 military personnel are in units that can provide specialized capabilities for domestic response operations. However, only about 3,100 of them are dedicated to consequence management. Another 18,000 are in AC units provided primarily for foreign operations, but which could be used domestically if available. Another limiting factor is that the 18,000 Active Army troops in the dual-use units are available only in the event of a terrorist attack using CBRNE weapons. Finally, about 38,162 National Guardsmen are assigned temporarily to provisional ARNG units, as well as to units that are part of the operational reserve to support foreign military operations. Whether this number of personnel for Civil Support is sufficient to the need depends on the demand for

¹⁵³. Lystra, 33.

¹⁵⁴. The size and composition of the CERF-P is uncertain. Some sources give a larger figure than the 186 cited above and include an engineer company and other elements.

¹⁵⁵. The Marine Corps maintains a Chem-Bio Incident Response Force (CBIRF) as its primary contribution to domestic and foreign consequence management operations. The CBIRF has 272 personnel and is commanded by a lieutenant colonel. It is a mobile, self-sufficient unit with a command section, a full set of sensors, communications suite, and security and support elements. The CBIRF may be deployed overseas but it is available for domestic operations as well. It is an element of the CCMRF.

responders and the extent to which non-DOD organizations can provide personnel for this mission area.

Table 72. Current Army Specialized Consequence Management Elements

	Strength	Comments
DEDICATED ELEMENTS	3,110	
JTF Civil Support	400	Command Hqs for CBRNE incidents
Army and Air Force Staff Elements	1,500	DCOs, EPLOs, and Hqs Staff Sections
National Guard Civil Support Teams and Staffs	1,210	55 units with 22 full-time personnel each
DUAL-USE ELEMENTS	18,000	
USA 20 th Support Command	5,000	AC chemical and AC/NG EOD units
USA CBRNE Consequence Mgt Response Team	5,000	Provisional team with rotating elements
USA Ready Response Force	4,000	Brigade TF for civil disorders
USAR Chemical Units	3,000	28 companies w/2 equipment sets
USAR Biological Defense Units	1,000	17 companies w/bio detectors
PROVISIONAL UNITS	38,162	
National Guard JTF Hqs	15,000	54 state headquarters at 300 each
NG CBRNE Enhanced Response Force Package	3,162	17 units of 186 troops each
National Guard Reaction Forces	20,000	1 unit of 400 troops per state

11. The U.S. Army Corps of Engineers

Another civil support resource is the U.S. Army Corps of Engineers (USACE), which has a major role in domestic consequence management.¹⁵⁶ USACE is designated in the NRF as the primary agency for ESF #3, Public Works and Engineering. USACE is organized into divisions and districts on a regional basis and provides construction management, design, and inspection oversight to the DOD Civil Works Program and to Military Construction. The major role of USACE in preparing for and responding to emergencies is to provide real estate, contract management, and emergency repairs to critical facilities. ESF #3 tasks include debris removal, restoration of public services, supply of ice and water, emergency repairs to the water supply system, structural evaluation, and damage assessment. USACE's work is performed almost entirely by private sector contractors.

¹⁵⁶ How the Army Runs, 477–478.

12. General Purpose Forces

In many response operations, there will be, in addition to the specialized organizations discussed above, a requirement for some number of general purpose units that can perform common tasks during an operation without special equipment or lengthy training. These units will be needed for a relatively short term during the response operation, and most of them will return to their training or other duties within a few days or weeks, depending on the nature and severity of the emergency.

D. Responding to Catastrophic Emergencies

Civil Support encompasses a broad set of operations. To date the Army has been able to provide most kinds of Civil Support without great strain on existing resources. The challenge is to provide military forces and other support to conduct response operations to manage the consequences of catastrophic incidents.

While DOD support to civil authorities in response operations is a Department-wide mission, the Army is expected to, and traditionally has, provided the bulk of the forces. The extent to which Army units and personnel are provided for these operations depends on the nature and scope of the emergency and the availability of non-DOD capabilities.

1. Categories of Emergencies

In order to address this issue, it is useful to classify emergencies into three categories: minor, major, and catastrophic.

Minor emergencies occur frequently. Thousands of minor emergencies—automobile accidents, heart attacks, crimes, disease, and household accidents—occur daily or weekly. Individually each has a relatively small societal cost in terms of death, damage, and disruption, but collectively they are a major burden. The civilian emergency management community is sized and organized to deal with these minor emergencies at the local and state levels without additional help from the federal government, except for crimes and terrorist attacks that involve federal law enforcement agencies. These emergencies are of no concern to DOD or the Army except to the extent that DOD personnel and facilities are affected directly.

Major emergencies occur infrequently but carry a higher cost when they do occur. Some of these are caused by nature; e.g., hurricanes, tornadoes, floods, drought, earthquakes, and volcanic eruptions. Some are caused by unintentional or intentional human acts; e.g., terrorist attacks, riots, gang warfare, epidemics, wildfires, and major accidents. Responding to major emergencies is often beyond the capabilities of the localities and states involved, so federal assistance is usually requested by the states and usually provided. Most of these are also declared disasters under the Stafford Act, which makes the states eligible to receive federal funds and support. Much of this federal

support is provided by the Department of Homeland Security, DOD, and other departments and agencies in accordance with the NRF. The National Guard of each state is involved in many of these response operations under the command of its governor. In many cases, significant DOD resources are also brought to bear. It is for this set of emergencies that current policies, which stress federalism, a tiered response, and waiting to be asked for help, were devised. The current DOD civil support posture appears to be adequate, albeit barely, for this set of emergencies.

Catastrophic emergencies occur rarely and are very costly. They are of grave concern and involve the deployment of substantial federal and DOD resources. The official definition of a catastrophic incident is:

any natural or manmade incident, including terrorism, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions.¹⁵⁷

2. Catastrophic Emergencies

Some examples of catastrophic emergencies are a nuclear attack, the New Madrid Earthquake, a Category Five hurricane, an influenza pandemic, an anthrax attack, a bio-terror attack, an attack on the food supply or livestock, a chemical attack, a radiological attack, an Electromagnetic Pulse attack, a major cyber-attack, or a prolonged power outage for any reason. Any of these emergencies will require an immediate and effective response from DOD. Such a response is presently beyond the capability of DOD, DHS, other Federal agencies, and the state, local, and tribal governments.

There is increasing interest in having the capability to deal effectively with these catastrophic emergencies. Congress and think tanks are urging the Executive Branch to improve the nation's ability to deal with the consequences of catastrophic natural disasters (such as Katrina) and particularly with terrorist attacks involving nuclear weapons or other weapons of mass destruction (WMD).¹⁵⁸ While interest does not always translate into action, it is possible and desirable that something be done in this regard. While low, the probability of terrorist attacks by nuclear, chemical, or biological weapons

¹⁵⁷. Department of Homeland Security, National Response Framework, DHS, January 2008, 42. "Incident" is a term favored by the law enforcement community, while "emergency" is used by the emergency management community. This difference in terminology is a manifestation of the divide between the preventers and the consequence managers that pervades this enterprise. We shall use the term emergency in this paper to mean an incident and the consequences caused by the incident.

¹⁵⁸. See Christine Wormuth, *Managing the Next Domestic Catastrophe*, CSIS, June 2008; Lynn Davis, et al., *Hurricane Katrina: Lessons for Army Planning and Operations*, RAND, 2007; Ashton B. Carter, William J Perry, Michael M May, *The Day After: Action in the 24 Hours Following a Nuclear Blast in an American City*, Preventive Defense Project, May 2007, a Hearing by the Senate Committee on Homeland Security and Government Affairs on Nuclear Terrorism: Confronting the Challenge of the Day After, April 2008; and numerous other references.

is sufficient to warrant attention. The occurrence of catastrophic natural disasters is certain, even if the timing is not. Efforts to improve the nation's ability to respond to catastrophic emergencies will affect DOD significantly and compete with foreign operations for resources. This problem is compounded by the fact that foreign military operations may require the same kinds of capabilities as those needed for domestic consequence management operations. This would be the case, for example, if the Army were involved in a foreign consequence management operation and had to protect the force against enemy CBRNE attacks.

The gap between the nation's capabilities and the nation's needs is nowhere greater than with respect to a nuclear attack on the United States. This is likely to be the worst-case scenario, although some analysts believe that a bio-chemical terrorist attack or a naturally occurring pandemic would be worse.

3. The Nuclear Detonation Scenario

Standard National Planning Scenario Number 1 is a 10-kiloton nuclear detonation in a major city. Several recent studies conducted or sponsored by DOD have addressed the adequacy of DOD's policies and force posture to deal with this no-notice attack. The general findings of these studies are that DOD response forces will be too little and arrive too late to be effective in support of DHS and other Federal agencies.

- A study by IDA in 2005 proposed a concept of operations for responding to a 10-kiloton nuclear attack and estimated that the response operation would take about 300,000 trained responders, 150,000 of whom would have to be police officers, ARNG troops, state defense force members, or federal troops.¹⁵⁹ This study increased awareness of what it would take to deal with this catastrophic emergency.
- A 2006 IDA study examined the response to a 10-kiloton nuclear detonation and suggested that following the current policies and procedures would cause the response operation to fail.¹⁶⁰
- Studies by OSD Program Analysis and Evaluation (PA&E) in 2008, as part of its series of Civil Support Analytic Baseline studies, suggest that DOD would need to provide 60,000 military personnel to respond to a 10-kiloton nuclear

¹⁵⁹. Brinkerhoff, John R., Robert L. Bovey, and Gene H. Porter, *Managing the Consequence of a Clandestine Nuclear Attack*, IDA Document D-3170, August 2005.

¹⁶⁰. Richter, Karen A., et al., *Illustration of Interagency Roles and Responsibilities—the 10kt Scenario*, IDA Paper P-4103, June 2006.

detonation, but that these personnel would arrive too late to be of significant help.¹⁶¹

- A study performed in 2008 by IDA examined several alternative force postures and found that it would take a sizeable number of trained, equipped, and dedicated personnel located inside major metropolitan areas to provide a timely and adequate response to a nuclear attack on that area.¹⁶²

Recently, there has been a lot of activity in the federal government to plan and prepare for such an attack. The parameters of an effective response have been stated and work is proceeding on preparing a concept plan for such an emergency.¹⁶³ There is an increasing awareness that developing an adequate capability to deal with a nuclear attack involves three things: changing policies, providing dedicated specialized units, and planning phased response operations for specific metropolitan areas.

4. Current DOD Posture for Response Operations

The DOD posture for responding to catastrophic emergencies is ill suited to the need and would lead to a failed response unless changes are made.

DOD Civil Support Policies are based on law, tradition, and customary practice. They may be tolerable when dealing with routine Civil Support Operations or even major emergencies, but they are inappropriate for catastrophic emergencies. This is not something that the Army can change, but it is something the Army might want to have changed. Adopting new and more effective policies will require some changes to the law, some revision of DOD Directives, and, above all, a reversal of widely held beliefs among the civilian and military leadership of DOD.

Restrictions on Employment. Laws that allow some of DOD's capabilities to be used only for CBRNE terrorist attacks are a serious barrier to effective responses to many potential catastrophic emergencies. This means that such important elements as the JTF-CS may not be used in response to attacks that do not involve the use of CBRNE weapons, or to natural disasters or accidents, even those that involve industrial chemicals.

Slow Arrival on the Scene. One of the characteristics of a nuclear attack is that the window for saving lives is very short. The number of casualties will be determined largely by what is or is not done during the first few hours after the detonation. The same

¹⁶¹. On the basis of the PA&E studies, DOD is programmed to form two more WMD Consequence Management Response Teams (WMDCMRT), but the utility of these teams has been questioned on the grounds that it would do little good to form them if they cannot arrive very early in the response.

¹⁶². This study is in draft and has not been approved for publication.

¹⁶³. See Planning Guidance for Response to a Nuclear Detonation, 16 January 2009, prepared by a Homeland Security Council Interagency Policy Coordination Subcommittee that included Army representatives.

thing is true for other catastrophic emergencies. In most circumstances, it would be inexcusable to continue to rely on the bureaucratic multi-stage process to obtain DOD support described earlier in this paper. Even the use of a work-around that has requests for assistance prepared in advance for rapid submission will not provide timely support for catastrophic emergencies. The governing principle ought not be a piecemeal introduction of units as they arrive, but a preplanned, phased, reinforcement based on having all elements in the response plan start out promptly and arrive as permitted by the relevant time-distance factors. All elements should move to their assigned initial positions as soon as they are aware of the detonation or receive warning. They should be authorized in advance to move without waiting for orders from higher authorities in accordance with the operations plan for the incident location.

Resources for Civil Support. The Army provides inadequate numbers of units and personnel to deal effectively with the consequence management responsibilities assigned DOD in the NRF. This is not surprising. The Army is having difficulty sustaining two major campaigns in the CENTCOM Theater, while also hedging against a possible MCO. Nevertheless, there is also a need to do more, do better, or both with the resources for Civil Support Operations. Barring an MCO, sufficient general purpose units will be available in the Continental United States (CONUS) and Hawaii to perform common tasks for a short period of time during a response operation. The challenge in providing more capability for domestic operations is in providing specialized units.

Specialized units are the key to dealing with a nuclear detonation, biological attacks, chemical attacks, other terrorist attacks, and catastrophic natural disasters. The same kinds of specialized units are also in demand for foreign operations. The Army has tried to cover this gap by planning to use specialized units designed and maintained for foreign operations for domestic operations as well. Since many of these specialized units will be deployed on a rotational basis, the ones not deployed are available for Civil Support Operations. The risk is that there will be a near simultaneous occurrence of a domestic emergency and a foreign emergency that will require a decision about priorities for use. Before encountering this potentially difficult situation, it would be useful to consider how the Army might be able to improve its capability to support a very large domestic operation with minimal adverse impact on its capability to support one or more very large foreign operations.

E. Improving Army Capabilities for Response Operations

Faced with the need to support current foreign military operations, hedge against a new MCO, and comply with constraints on money and manpower, the Army cannot create a dedicated civil support force sufficient to ensure a perfect response to catastrophic emergencies. It can, however, improve its capability for emergency response operations by making some low-cost adjustments to the current status quo. The Army

cannot do this alone and must work within the DOD framework as well as the larger framework managed by DHS, which is addressing a nuclear detonation and other catastrophic emergencies. If done thoughtfully, the capability of the Army for this mission can be improved substantially at a relatively low cost. Resolving this problem requires serious consideration of steps that do not conform to current doctrine and practice. In fact, current policies and practices are a major obstacle to achieving a workable solution. Some of the steps that can be taken are discussed below in general order of increasing cost.

The least expensive course of action is to continue to rely on the current force posture described above. Although the quality of the units is high, this posture is barely adequate for major emergencies and small CBRNE attacks. The major problem with the status quo is that the DOD response to a nuclear attack or other catastrophic response will likely be too little and too late. There are too few DOD units to deal effectively with many CBRNE attacks and all catastrophic emergencies, and most of them will not arrive on scene until 24 to 72 hours after an incident occurs. This problem is shared with the rest of the U.S. government and the states and localities as well.

1. Action 1. Change Laws, Policies, and Practices

It would be possible without much expense to revise the laws, policies, and practices so that they enable prompt responses to catastrophic emergencies. The effectiveness of existing units would be improved greatly by simply allowing them to act on warning and move without delay to incident areas and start to work. Persistent adherence to the supposed dictates of federalism will probably result in a piecemeal application of resources that will allow more casualties, more damage, and longer periods of disruption. Basic military thinking places great value on fast action with overwhelming force, and this principle can also apply to domestic response operations. The following specific changes would greatly improve the Army and DOD's ability to implement this principle during catastrophic emergencies at no additional cost:

- Permit federal resources and forces to move on the occurrence or in anticipation of catastrophic emergencies without waiting for a governor to request such support. The President has the authority to do this, and it can be done without impairing the sovereignty of the states by allowing governors to remain in control of their own jurisdictions during the response operation, with federal elements in support. This change alone will improve the timeliness of the arrival of existing units enough to reduce casualties significantly.
- Immediately establish a top-down federal command structure to control all federal elements and allocate federal resources to the states. This action is needed for catastrophic emergencies that involve several states. This action will

not involve the declaration of martial law or a takeover by DOD or the U.S. government.

- Permit those units presently restricted to CBRNE terrorist attacks to engage in the full range of emergencies that occur. The present situation deprives the nation of substantial resources during more frequent non-terrorist emergencies. This change can be done without diminishing readiness for CBRNE attacks. Specifically, it makes it possible for the JTF-CS to respond to catastrophic natural disasters.
- Arrange for the President to authorize the use of federal troops to enforce the law during catastrophic emergencies immediately after one occurs or is anticipated. Such authorization should allow the troops to perform security duty without engaging in law enforcement per se. There will be civil disorder during these emergencies, and it is better to have additional security capabilities on hand at the start than to wait until the situation is out of control to make this authorization.

Table 73 summarizes the thrust of the suggested policy changes.

Table 73. Suggested Changes in DOD Policies and Practices for Civil Support

	Current	Suggested
Response	Reactive	Proactive
Operations Plans	Improvised	Pre-Scripted
Command	Bottom Up	Top Down
JTF-CS, CCMRF, etc.	CBRNE only	Full-Spectrum
Support Sequence	Pull	Push
First Federal Troops	Circa 72 hours	NLT 4 hours
Can Federal Troops Enforce the Law?	No	Yes—Immediate Presidential authorization

2. Action 2. Find Other Inexpensive Sources of Personnel

One of the basic problems facing the Army is that there are too few soldiers and/or civilian employees to do all that needs to be done. This suggests that it would be a good idea to find additional sources of inexpensive manpower to take some of the burden off the Army. There is already precedent for this kind of action—EPLOs are reservists serving in inactive duty status. Other potential sources of additional manpower are discussed below.

- **Army Individual Ready Reserve.** The Army Individual Ready Reserve (IRR) is a potential source of trained individuals to support domestic operations. During the Cold War, the IRR was to be the primary source of fillers for existing

units and the initial source of replacements during a conventional war with the Warsaw Pact. In recent years, the size and availability of the Army IRR has diminished. However, IRR personnel have served in significant numbers in the Persian Gulf War and current operations. Some of them could be persuaded to volunteer for temporary active duty for Civil Support Operations.

- **Retired Military Personnel.** There are a great many officers and senior NCOs on retired status who receive what is, in effect, retainer pay. It is likely that some of them would be willing to receive additional training for Civil Support Operations and return to active duty temporarily to take part in response operations.
- **Other Services.** The Marine Corps, Air Force, and Navy are also facing an excess of demand over supply for military personnel and civilian employees. The Air Force Reserve and the Air National Guard already participate extensively in Civil Support Operations. However, it might be possible to increase the numbers of Air Force and Navy personnel in the joint units created for Civil Support Operations. The Navy might be able to assign some of its Selected Reservists to this mission. The Air Force and Navy have IRR personnel who can be utilized for Civil Support Operations. These sources add no additional cost because these personnel are already trained and paid for.
- **Federal Auxiliary Forces.** There are three federal auxiliary para-military forces that can contribute to Homeland Security preparedness and response on a voluntary basis:
 - The Civil Air Patrol (CAP) is funded and overseen by the Air Force.¹⁶⁴ There are 36,000 members that operate a fleet of 550 privately owned single-engine aircraft. The CAP is already heavily involved in response operations and ought to be included in DOD response planning. In addition, there are 21,000 Civil Air Patrol Cadets that participate in aviation related activities. The Air Force provides about \$50 million annually to support the CAP to provide aircraft maintenance, facility maintenance, and to reimburse members for some operational support costs. CAP members are authorized to wear Air Force uniforms with special markings. They are not authorized to bear arms.
 - The Naval Militia are state military forces that operate a variety of small vessels. Currently, three states have Naval Militia units, but there is interest in forming more of these units to support both prevention and consequence management operations. These units are funded in the Navy budget and are overseen by the Department of the Navy. Federal law allows members of

¹⁶⁴ Civil Air Patrol Annual Report 2008, and Civil Air Patrol Annual Financial Report 2008, *passim*.

the Naval Reserve and Coast Guard Reserve to belong to Naval Militia units. Naval Militia members are authorized to wear Navy uniforms with special markings and may be authorized to bear arms.

- The Coast Guard Auxiliary is part of the U.S. Coast Guard and provides boating safety instruction and vessel inspection services.¹⁶⁵ There are about 30,000 members that participate in these programs on a voluntary basis. They use their own approved boats and are reimbursed for some of the costs of performing their missions. Funding in FY 2005 was \$10 million. Members of the Coast Guard Auxiliary are authorized to wear Coast Guard uniforms with special markings. They are not authorized to bear arms.

- **State Defense Forces.** DOD could encourage governors to expand their State Defense Forces (SDF). Federal law permits governors to maintain these forces to replace or augment their National Guard. SDF units currently exist in 22 states and have an active strength of 22,000 personnel. If the SDF were expanded to maintain units in all states with a substantial number of members, each governor would have an additional force to augment the National Guard in a response operation. Most of the members of the SDF have prior military service, and there is a substantial pool of recent veterans that could be recruited for this mission. SDF personnel are authorized to wear modified Army uniforms, and the SDF can receive excess equipment from the Army. SDF personnel would receive no pay for training, but there would be some minor costs associated with use of Army training facilities and an average of about \$1,000,000 per state per year, or \$50,000,000 overall for administration. These state forces would not be funded by DOD. Administrative funds could be provided by DHS under that department's volunteer programs.

3. Action 3. Convert Specialized National Guard Provisional Units to Permanent Units and Dedicate Them to the Civil Support Mission

This action would convert the CERFPs and NGRFs of the National Guard into permanent units (as opposed to provisional units). Currently these are faux units staffed by about 33,000 personnel from other units or by entire units from the operational reserve. These units are staffed mostly by traditional Guardsmen and have cadres of full-time Guardsmen. These provisional units work well enough when there is no emergency, but will not work if their personnel are needed to deploy for an ongoing campaign or mobilize for an MCO and there is a terrorist attack on the U.S. Dedicating these units to civil support can improve the timeliness and effectiveness of support the Army can provide in a response operation. More importantly, having these as dedicated units would

¹⁶⁵ www.cgaux.org, 25 August 2009.

provide state and local authorities with certainty regarding the amount and kind of support they can count on when a catastrophic emergency occurs. It will also help define the limit on specialized support that DOD will provide and stimulate states and localities to fill in the gaps. Paradoxically, this will ease the burden on the Army to provide units for domestic operations that it would prefer to reserve for foreign operations. It would also allow the Army to disband its active CCMRFs, send the specialized Civil Support equipment to the ARNG, and allow several AC BCTs to concentrate on conducting campaigns overseas. The “cost” of this alternative would be dedicating 33,000 ARNG personnel to Civil Support Operations, which would decrease by the same amount the number of Army personnel available for foreign operations, but no additional funding or personnel authorizations would be needed.

4. Action 4. Staff Dedicated Guard Civil Support Units with Personnel Assigned on Tours from Other Guard Units

Another version of Action 3 could reduce its cost. ARFORGEN provides a way for the Army to dedicate 33,000 National Guardsmen to civil support without taking a corresponding penalty from the Operational Reserve. This variation would establish the specialized civil support units explained above, but staff them with personnel from operational reserve units in the middle of the ARFORGEN cycle of five years between deployments. This is similar to what the Guard is doing now, but it would institutionalize the civil support units and provide the basis for reassignment of Guardsmen to and from those units in an orderly manner. The downside would be, as is now the case, reduced readiness of some Guard units in the middle of their reset phase. It would also present a dilemma if a catastrophic emergency or emergencies occur simultaneously with a demand for large numbers of troops for foreign operations.

In addition to the dedicated specialized units that will provide the initial echelon of Army forces for the response operation, the Army (and the other Services) will have to use large numbers of personnel in the GPF to perform many of the common tasks to be done in response to a catastrophic emergency.

The combined results of Actions 2 and 3 are shown in Table 74.

Table 74. Possible Army Civil Support Force Posture with Action 3 or 4

	Specialized and Dedicated (3)	Specialized and Dual-Use* (4)	General Purpose**
AC	2,000	14,000	90,000
ARNG	33,000		90,000
USAR	2,000	4,000	40,000
Totals	37,000	18,000	220,000

*These are the maximum strengths available; some of these personnel will be deployed.

**These personnel are at CONUS home stations in the ready phase of ARFORGEN.

Table 74 shows only the Army forces that could be made available. In the event of a catastrophic emergency, they would be part of a joint domestic operation under NORTHCOM or PACOM that includes Navy, Marine Corps, and Air Force elements. These DOD elements would be part of a larger federal force headed by DHS providing support to state and local government personnel in an integrated response operation.

F. Observations

The Army faces a dilemma with respect to its participation in domestic consequence management operations. Understandably, the Army is not overly enthusiastic about taking on this mission or devoting many resources to it. The Army is heavily engaged in waging a long war against terrorism, while also maintaining readiness to deal with other contingencies. That being said, it is also clear that if a nuclear detonation or other catastrophic emergency occurs in the U.S., the people will expect the Army and other DOD components to respond, and the President will order DOD to help.

The Army must be able to conduct ongoing counterinsurgency and SOs while maintaining a hedge against an MCO. It must do this within the constraints of a large but limited budget. When viewed from the Army's perspective, the burden of providing adequate civil support for domestic consequence management further stresses an already stressful situation.

The key issue raised by this situation is the extent to which the Army should dedicate specialized units to civil support or continue to rely on dual-use and provisional specialized units to support the domestic civil support consequence management mission. IDA's analysis suggests that only dedicated specialized units can provide both the necessary skills and equipment and the rapid response necessary to be effective. This paper suggests some elements of a partial solution to the dilemma.

Establishing a set of dedicated specialized consequence management units within the National Guard will help state governors carry out their responsibilities for consequence management of lesser emergencies as well as catastrophic emergencies. Increasing the ability of governors to deal with emergencies decreases their need to request federal help.

Modernizing policies and practices will benefit the Army, other providers, and the recipients of civil support. Responses will be faster, and arrival will be more certain.

Finding other inexpensive sources of personnel to staff Army civil support units on a voluntary basis will also reduce the burden on the Active Army and National Guard. Each person added to the specialized or general purpose units in this manner will allow one more soldier to be available for foreign operations. Also, DOD support for robust state defense forces will increase the capabilities of the states with such units and reduce their reliance on federal troops.

Dedicating a substantial force of specialized units to domestic Civil Support Operations will give the states and localities a better idea of just how much support DOD will provide. In one sense, it makes the recipients more confident of getting substantial support. In another sense, it makes the recipients aware that DOD support is not unlimited. In effect, this approach provides the other participants with a firm understanding of what the Army will and will not do for this mission. This understanding is likely to encourage DHS, other federal agencies, and state and local authorities to strengthen their own capabilities for consequence management.

Paradoxically, this approach means that Army forces from the National Guard will continue to be involved in major, and perhaps even some minor, emergencies using many of the same resources already in place to deal with catastrophic emergencies. Since the National Guard is already engaged in dealing with the full range of emergencies, this new arrangement will, in one sense, ratify the existing situation as well as improve the ability of governors to deal with emergencies. This approach is beneficial from a national viewpoint because it rests on the premise that it is necessary to spread the cost of preparing for rare but costly catastrophic emergencies by using some of those same capabilities (the dedicated assets) for more frequent lesser emergencies.

Finally, it must be made clear that the Army civil support posture discussed in this paper will not by itself ensure a satisfactory response to a nuclear attack or other catastrophic emergency. Moreover, the nation cannot afford a system designed to deal with a nuclear attack only. It can afford, however, a system that manages lesser emergencies well and has a credible capability to surge for nuclear attacks and other catastrophic emergencies. This paper suggests how the Army might contribute to that capability without unduly damaging its ability to conduct foreign military operations.

11. Hedging Against a Major Combat Operation

A. Introduction

This chapter examines how it could be possible to provide a hedge against the occurrence of a Major Combat Operation (MCO) that would require significant military forces. It is assumed that in the worst case, the MCO would involve conventional warfare and heavy forces.

A hedge is an action taken to reduce the risk of being caught short when an unlikely but consequential event happens. In the context of this study, it is a set of actions taken to prepare for another MCO in addition to OIF and OEF that could occur in the near future. A hedge has to be both inexpensive and potentially effective. In the present situation, a hedge is needed against the outbreak of a conflict that would require the Army to conduct protracted large-scale conventional land warfare operations.

B. Elements of the MCO Hedge

The MCO Hedge could include some or all of the following elements:

- A plan for preparing and deploying ready units of the Rotational Forces
- Heavy “plugs” of units to be attached to or in support of IBCTs called on to conduct conventional warfare in an MCO or aggravated counter-insurgency campaign
- A Strategic Reserve of units that provides a heavy corps to deploy to the MCO
- Plans and preparations for full mobilization with the goal of forming new units

1. Deployment of the Rotational Force

In the event of another MCO, it will be necessary to marshal Army forces in a new area of operations in sufficient strength to prevent initial defeat pending arrival of additional forces needed to ensure ultimate victory. This would have to be done (in the short-term at least) without major disengagement from the two ongoing campaigns in Iraq and Afghanistan. Theoretically, under ARFORGEN, one-third of the Rotational Force could be deployed [or be preparing to deploy] to Iraq or Afghanistan, another one-third would be in training and reasonably ready to be deployed, and the remaining one-third would need to be reset and trained before it could deploy. This means that there could be about 15 AC BCTs available to deploy to the new theater of operations in the

first days of the MCO. In this event, to provide required CS/CSS, it would probably be necessary to ask the President to use existing partial mobilization authority to call up a significant portion of the ARNG and USAR to active duty, impose stop-loss, and extend tours in OIF and OEF indefinitely. If they do not already exist, plans to do this should be prepared and gamed.

2. Brigade-Force Heavy Plugs

BCTs can be augmented for a conventional MCO by providing additional units either attached to them or available in the modular support brigades supporting them. Some of the unit types that are particularly valuable for high-intensity conventional operations, but less in demand for stability operations, are shown in Table 75. In some cases, the hedge units differ in kind, and in other cases, in the numbers needed.

Table 75. Some Unit Types Needed for High-Intensity Conventional Combat

Unit Types	Capabilities
Combat Units	
Heavy BCTs	Provide mobile armored maneuver elements
Separate Combined Arms Battalions	To provide tank/mech capability for IBCTs
Combat Support (CS) Units	
Armored Cavalry Squadrons	Corps covering force and flank protection
155mm Self-Propelled (SP) Fires Battalions	Direct support of mobile BCTs
Tracked MLRS Fires Battalions	Massed counter-battery fires
Mechanized Engineer Combat Battalions	Mobility & counter-mobility with heavy units
Engineer Bridge Companies	Mobility for heavy units
Chemical Companies (Obscurant)	Enable maneuver of mobile forces
Attack Aviation Battalions	Fire support for moving columns
Short Range Air Defense Battalions	Point air and UAV defense for mobile columns
Patriot Air Defense Battalions	Area defense against missiles
Combat Service Support (CSS) Units	
Heavy Truck Companies	Move tanks and fighting vehicles over distances
Ammunition Supply Companies	More needed for tank and artillery units
Medium Truck Companies (POL/Cargo)	More needed to haul ammunition and fuel
Medium Maintenance Companies	More needed for tracked vehicles

An MCO plug could include a combined arms battalion, an engineer combat company, a maintenance detachment, and a truck platoon for the BCT itself. It could also provide 155mm SP Howitzer battalions, mechanized engineer combat battalions, ammunition supply companies, and heavy truck companies in the supporting elements at division and corps level. The size of an MCO plug might be as much as 2,000 troops per

IBCT being augmented. There will be about six AC and six ARNG IBCTs available for immediate deployment to a new MCO or to an existing active theater should the need occur. Providing Heavy Plugs for these 12 IBCTs should require about 24,000 soldiers, half in the AC and half in the ARNG. Another way to provide this augmentation would be to place all of the Heavy Plugs in the ARNG, and include them with the Heavy Strategic Reserve Force (described below) for maintenance support and training oversight.

3. A Strategic Reserve Force

The action with greatest potential effect and impact on the Army force structure would be to form a heavy Strategic Reserve Force in the National Guard. A Strategic Reserve Force can be committed by the President when other forces are insufficient to prevent disastrous defeat or attain decisive victory. It is the last resort when all else fails and would be an important part of a hedge against another MCO. If the situation required, initial forces of uncommitted ready units of the Expeditionary Force would be deployed and then followed by a Strategic Reserve Force consisting of a heavy corps of HBCTs and supporting units.

The Army can provide a heavy corps force as a Strategic Reserve by placing it in the ARNG. Given the necessity to sustain campaigns in Iraq and Afghanistan, placing a Strategic Reserve in the AC is not an attractive option. Moreover, there are some advantages to putting the Strategic Reserve heavy corps in the ARNG. Doing this:

- Reduces the cost of the Strategic Reserve by staffing it with National Guardsmen, who cost less than Active Army soldiers because they are paid for only 39 days of training per year;
- Reduces the need to have redundant ARNG support units, in effect getting this capability at a reduced price (see Chapter 12);
- Provides a way to keep and maintain some of the existing stocks of M1 Tanks and M2 Fighting Vehicles that are excess to the demands of the Army's current campaigns but still valuable for high-end conventional combat;
- Challenges the National Guard to be ready to mobilize and deploy quickly in the event of an MCO; and
- Makes good use of the excellent maintenance system in the ARNG to keep the heavy equipment in good condition.

The Strategic Reserve Force would consist of seven HBCTs and other heavy unit types plus support units as shown in Table 76. Based on a BFE of 7,000 that does not include IW enablers, this would require about 50,000 National Guard troops.

Table 76. Notional Composition of Strategic Reserve Force

Unit Type	Number
Corps Headquarters	1
Division Headquarters	2
HBCTs	6
Fires Brigade Headquarters	2
MLRS Battalions	4
155mm SP Howitzer Battalions	10
Engineer Brigade Headquarters	2
Engineer Combat Battalions (M)	6
Air Defense Brigade Headquarters	2
Air Defense Battalions	8
Sustainment Brigades	6

4. Planning for National Mobilization

There is a possibility that an unanticipated MCO would exceed the capabilities of DOD to the extent that there would be the prospect of a serious defeat that would threaten the interests or even the survival of the nation. In that event, it would be necessary to mobilize additional resources and create additional military units. This would be the worst case, but there might be other less dangerous circumstances that would also warrant a major mobilization. In those circumstances, it would be useful to be able to expand existing programs and initiate new programs. The amount of land combat power currently available appears to be marginally adequate for a third MCO, so it would be prudent to take some inexpensive steps to have a latent capability for expansion.

The idea of national mobilization has nearly disappeared from DOD since the end of the Cold War. It could be resurrected as part of the MCO hedge. Much can be accomplished simply by considering what such a mobilization might involve and what plans and preparations are needed to be able to mobilize if that becomes necessary. As a minimum, the followings steps could be taken:

- Ask the Congress to revise the current Selective Service law that has not been updated since the end of the Vietnam War. The current law cannot be implemented in its present form. A new law and system appropriate for modern times can be prepared and provided for congressional action. The new law would establish a draft system in stand-by status that would be available for Presidential action if that becomes necessary.
- Develop a concept for graduated mobilization that can be implemented or reversed in stages as an MCO threat develops or wanes. The mere existence of this concept can add to our deterrence posture.

- Envision how the Army might be able to expand rapidly to provide additional units for a protracted MCO and the numbers and kinds of units that would be formed.
- Assess the industrial and economic effects of a major mobilization, and consider the steps to be taken if industrial mobilization is needed.
- Assess the need for USAR Training Units, to ensure an ability surge through military training to large numbers of training sites with untrained draftees or volunteers.
- Consider a concept for maintaining excess military equipment in unit sets of skeleton organizations that could be rapidly filled.

C. Observations

Providing a hedge against another MCO is often cited as a strategic goal but units and resources to achieve this goal are seldom provided. Consideration should be given to the actions discussed above in this chapter. Not to do so could invite yet again a hasty, improvised response that would be costly and could be insufficient to the need. As this chapter demonstrates, it is possible to provide a reasonable hedge against the unexpected within current personnel and funding constraints. The most ambitious action is the proposed Strategic Reserve Force, but even that can be created at a relatively low incremental cost if it is formed as described above. Perhaps the most important and least expensive hedge action would be to revive the notion of National Mobilization and consider what can be done to facilitate doing that if it becomes necessary.

12. Balancing the Expeditionary Force within Constraints

A. Introduction

This chapter describes a process for balancing the Expeditionary Force to conduct Full-Spectrum Operations within constrained manpower and funding authorizations. The Army is stressed because it is engaged in two major campaigns that, along with other ongoing and potential operations, demand more force structure and more troops and civilian employees than the Army has. The stress could be reduced by adding money and soldiers to provide a larger Army that can perform all of its missions at less risk, but because of congressional limits on military personnel authorizations and funding, that is not to be the case. It is necessary, therefore, to consider and perhaps adopt some innovative solutions that will allow the Army to meet current demands and remain ready for possible future demands within existing resource constraints.

B. Basic Assumptions

In order to proceed with this process it is necessary to make some assumptions and clarify what is meant by Full-Spectrum Operations, what the Army is supposed to be able to do, and what would constitute a balanced force structure.

1. Army Missions

The general assumptions upon which this analysis is based are stated below. They are based on guidelines prescribed by the Secretary of Defense for the kind of Army that is desired.¹⁶⁶

The Army needs to be able to:

- Conduct ongoing CMO campaigns:
 - OIF at a level of about 40,000 troops for 2 years
 - OEF at a level of 90,000 troops for 5 years
 - Other global operations at current levels indefinitely
- Conduct LIOs with about 5 BCTs, with one or two division headquarters, and sufficient supporting brigades

¹⁶⁶. Gates, Robert M., Secretary of Defense, "A Balanced Strategy: Reprogramming the Pentagon for a New Age," *Foreign Affairs*, January 2009, is the basis for this section.

- Conduct Homeland Defense operations
- Conduct Civil Support operations
- Hedge against an MCO

2. A Balanced Force Structure

The Army Force Structure is balanced when:

- Military manpower authorizations spaces are less than military personnel strength faces and accommodate non-unit personnel.
- The mix of units among the AC, ARNG, and USAR provides a workable compromise between costs and availabilities.
- BCTs are supported by the number and mix of support units needed to maximize their combat potential.
- The mix of HBCTs, SBCTs, and IBCTs meets the needs of the operational commanders.
- The proportion of units provided for current campaigns and those provided for future campaigns is appropriate to hedge against future threats.

The primary focus of this chapter is to determine if there are enough support units in the Expeditionary Force in aggregate to allow the BCTs to function at full capacity. The balance between current and future operations was addressed in the previous chapter. The mix of HBCTs, SBCTs, and IBCTs is taken as a given at this point. The mix of units among the Army's three components is not addressed. The Army has said it will try to close the gap between authorizations based on unit composition and the number of military personnel in the Army to bring "spaces" into a balance with "faces," and this kind of balance is not considered in this analysis.

3. Resource Assumptions

The Army's military strength authorizations for FY 2010 are ensured to total 1,133,200, as follows:

- AC: 569,000, including 22,000 temporary spaces for three years
- ARNG: 358,200 spaces
- USAR: 206,000 spaces

It is assumed that Army funding will remain at FY 2010 levels.

The Schematic Model of the Army discussed in Chapter 8 is used to provide rigor to the analysis. This model shows the allocation of military personnel authorizations among the various Army missions. This chapter is concerned primarily with the Expeditionary Force comprising units allocated to Joint Forces Command and the six Regional Combatant Commanders. All BCTs are in the Expeditionary Force.

C. Analytical Approach

The analytic process is to examine successively the kinds of operations for which the Army must provide units and trained personnel to the unified commands. The general approach is to establish a framework in which a judicious allocation of military personnel authorizations (serving as a surrogate measure for all resources) can be made to provide the “Army We Want” within current constraints. The study is done using a sequential methodology, and focuses on five variables. Several excursions are addressed, and the results of each provide a platform for the next excursion.

1. Methodology

The analysis is conducted in the following manner:

- Military personnel authorizations are allocated among the various missions in the Schematic Model as a base.
- Expeditionary Force military personnel strength is obtained by subtracting from the Operating Force strength the personnel allocated to other missions.
- Expeditionary Force military personnel strength is broken down to determine the number of military personnel available for each of the three ARFORGEN rotational cycles.
- The number of military personnel required for one ARFORGEN rotation is computed using the BFE and applying a factor to take into account the difference between Active and Reserve rotational cycles.
- The required and available strengths are compared to determine whether there is sufficient strength to support each BCT fully.
- In the event of a shortfall in available strength, that version is declared infeasible and the number of BCTs that would have to be eliminated to make it feasible is shown.

This operation is done first for the current program base case, and then repeated after new missions are added, strength is increased, and/or dwell time policy is adjusted.

2. Variables

The major variables to be addressed in this analysis are as follows:

- **The number and mix of BCTs.** The Army program includes 73 BCTs—45 AC and 28 ARNG. The ability of the Army to conduct sustained rotational operations depends on having the correct number and mix of support units, which in turn depends on having sufficient manpower authorizations to fill those units. If available manpower authorizations are too few, it is necessary to reduce the number of BCTs to achieve balance.

- **The number of Theater Forces personnel.** The criteria for allocating units and military personnel to the Theater Forces depend on what is provided for the theater commanders to conduct their day-to-day missions.
- **The number of military personnel dedicated to Civil Support operations.** The number of military personnel dedicated to the conduct of Civil Support operations is about 3,000 but could increase depending on how much emphasis is placed on this mission. Increases in personnel dedicated to civil support will reduce the number of troops available to the Expeditionary Force.
- **The strength of a Strategic Reserve.** At present, there are no units or military personnel allocated to a Strategic Reserve. However, it may be prudent to form a Strategic Reserve Force as part of a hedge against an MCO and allocate some units and military personnel to this mission.
- **The rotational cycle and dwell time for Reserve Component units.** Because of the differences in rotational cycles, the Army has to maintain several RC support units for each supported AC BCT in order to ensure proper support for sustained foreign operations. It may be necessary to modify the rotational cycle for RC units and adjust the dwell time.

3. Stages in the Design Process

The analysis is conducted in the following stages:

- The base case
- Providing dedicated Civil Support units
- Providing a Strategic Reserve as part of a hedge against an MCO.
- Adding 22,000 additional military personnel authorizations.
- Reducing the dwell time of RC units from 60 months to 51 months.

D. The Base Case

The starting point for the Base Case is the Army's program for FY 2010 as shown in Table 77. This does not include the 22,000 temporary military spaces. All military personnel strength data in the following tables are expressed in thousands.

Table 77. The Army at End of FY 2010 (000s)

TOTAL ARMY MILITARY PERSONNEL: 1,111.6 (547.4 AC; 358.2 ARNG; 206.0 USAR)									
Operating Force: 870.6 (404.4 AC; 320.7 ARNG; 145.5 USAR)									
OSD, etc.	Functional Commands				Regional Commands and JFCOM				
	NORTH or PAC	SOC	STRAT	TRANS	The Expeditionary Force: 820.9				
Non-Army	HD/CS	SOF	S&MD	SD&D	Strategic Reserve	Theater Forces	Force One	Force Two	Force Three
15.0	3.0	28.0	2.7	1.0	0.0	49.3	257.2	257.2	257.2
Generating Force: 241.0 (143.0 AC; 37.5 ARNG; 60.5 USAR)									

1. The Expeditionary Force

The content of the Expeditionary Force is determined by the ARFORGEN system in which the Army plans to rotate AC units on a three-year cycle and RC units on a six-year cycle. In addition to three rotational forces, there are also Theater Forces that are sustained by individual rotation and, for the purposes of this analysis, a non-rotational Strategic Reserve, whose strength at present is zero. The structure of the Expeditionary Force is shown in Table 78.

Table 78. The Structure of the Expeditionary Force

Expeditionary Force				
Non-Rotational Non-Deployed	Non-Rotational Deployed	ARFORGEN Rotational Forces		
Strategic Reserve	Theater Forces	Rotation Force I	Rotation Force II	Rotation Force III
		Deployed	Reset and Train	Ready

Table 78 is an idealized representation of the Expeditionary Force in which ARFORGEN operates to provide one of these three corps force packages for employment at any one time. A proper design would have three identical rotational forces, one deployed, one in reset and training, and the third ready for deployment. This would provide, for AC units, 24 months of dwell time between successive 12-month deployments, if required. In reality, the three rotational forces are not identical and the desired one-year deployment in a three-year rotational cycle has not been achieved.

All but one of the Army's BCTs are in the Rotational Forces. One Active HBCT in Korea is part of the Theater Forces and is not shown in the table. The current mix of BCTs in the Rotational Force by component and type is shown in Table 79.

Table 79. BCTs in the Rotational Forces

Type of BCT	Active	Guard	Total
HBCT	18	6	24
SBCT	6	1	7
IBCT	20	21	41
TOTAL	44	28	72

The mix of BCTs is not addressed in this study but will have to be considered in future iterations of the methodology. By re-missioning and re-equipping some BCTs (mostly heavy but including at least one airborne), the Army has created eight AABs that are temporarily not available rapidly for MCOs. The Army is also converting eight HBCTs to SBCTs.

Theater Forces are a distinct sub-element of the Expeditionary Force consisting of those units and personnel necessary to meet the day-to-day needs of the six Regional Combatant Commanders. About 49,300 troops are in this category and are sustained by an individual replacement system. Theater Forces include the theater headquarters, theater commands, and some sustainment elements.¹⁶⁷ At this point, it is not clear what is in the Theater Forces, and this needs to be clarified by the Army before this process can be done accurately.

2. Military Personnel Available for a Rotational Cycle

Table 80 shows the composition of the Operating Force by Component.

Table 80. Base Case Operating Force (000s)

	OSD	NORTHCOM/ PACOM	SOCOM	STRATCOM	TRANSCOM	Expeditionary Force	Operating Force
Active	14.0	0.6	25.0	2.3	0.5	362.0	404.4
Guard	0.5	1.2	3.0	0.4		315.6	320.7
Reserve	0.5	1.2			0.5	143.3	145.5
Total	15.0	2.0	28.0	2.7	1.0	820.9	870.6

¹⁶⁷. There are different figures for the strength of the Theater Forces, and the discrepancy needs to be clarified. Despite repeated requests, the strength and composition of this category has not been provided by the Army.

Table 81 shows the internal structure of the Expeditionary Force for the Base Case. This calculation has been done by component: AC, ARNG, and USAR. This has been calculated by subtracting from each component its theater forces and then dividing by three. The result is that for the Base Case, the Army can make 257,200 military personnel available for each of the three rotational forces.

Table 81. The Expeditionary Force for the Base Case (000s)

Component	The Expeditionary Force: JFCOM and Regional Combatant Commands					Component Totals
	Strategic Reserve	Theater Forces	Rotation One	Rotation Two	Rotation Three	
AC	0.0	42.5	106.5	106.5	106.5	362.0
ARNG	0.0	2.7	104.3	104.3	104.3	315.6
USAR	0.0	4.1	46.4	46.4	46.4	143.3
TOTAL	0.0	49.3	257.2	257.2	257.2	820.9

3. Reserve Unit Differential

The Reserve Unit Differential is caused by the difference between the Active and Reserve rotation cycles as prescribed by DOD.¹⁶⁸ The effect of this differential is that more than one ARNG or USAR support unit must be maintained in the force structure to ensure continuous support of one active BCT.

The policy goal for AC units is a 12-month deployment once in every three years, with a dwell time of 24 months between deployments. The policy goal for involuntary mobilization of RC units is 12 months on active duty with a dwell time of 60 months before the next mobilization. The utilization period for RC units is reduced by two months of pre-deployment training and one month of post-deployment processing, so RC units actually deploy for only nine months. Figure 16 shows the rotational cycles for AC and RC units under present policies that provide one deployment ever three years for AC BCTs (shown in shades of blue) and one mobilization every six years for RC support units. The time period for the figure is calendar quarters. The figure therefore shows rotational cycles for 24 quarters, or 6 years.

¹⁶⁸. Policy on involuntary active duty and rotation goals is set forth in Secretary of Defense Robert M Gates, Memorandum, "Utilization of the Total Force," 19 January 2007.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1 st AC BCT												1 st AC BCT											
				2 nd AC BCT												2 nd AC BCT							
								3 rd AC BCT												3 rd AC BCT			
RC Unit 1																							
			RC Unit 2																				
						RC Unit 3																	
								RC Unit 4															
												RC Unit 5											
															RC Unit 6								
																		RC Unit 7					
																				RC Unit 8			

Figure 16. Rotational Cycles for AC and RC Units under Current Policies

Thus, it takes four RC units (deployed for $4 \times 9 = 36$ months) to match the in-theater time of three AC units (deployed for $3 \times 12 = 36$ months). Because RC units can be mobilized only once in six years, the Army must maintain eight RC units in the force structure to support three AC BCTs, or two and two-thirds RC units to support one AC BCT. Similarly, it takes four ARNG BCTs in the force structure to provide one ARNG BCT in a theater over the three-year cycle, and it takes two and two-thirds ARNG BCTs to provide one in a theater at any time.

4. Military Personnel Required for a Rotational Cycle

The number of military personnel required for one of the Base Case rotational cycles is calculated by allocating the BCTs to the rotational cycles, applying the BFE to the BCTs, and adjusting for the difference between AC and RC rotational cycles by applying the Reserve Unit Differential. The distribution of BCTs for the Base Case is shown in Table 82.

Table 82. Distribution of BCTs for the Base Case

	Strategic Reserve	Theater Forces	Rotation One	Rotation Two	Rotation Three	Total
Active		1	15	15	14	45
Guard			9	9	10	28
Total		1	24	24	24	73

The BFE is the number of personnel required in the theater of operations to support one BCT, including the BCT itself. Based on OIF experience, the BFE has been estimated to be 9,000 military personnel and 3,500 contractors (see Chapter 3 for more details). The military personnel part of the BFE has two increments: a BCT of 3,600 military personnel and a support increment of 5,400 military personnel.

5. Military Personnel Required for One Rotation

The number of AC and RC military personnel required for one rotation is shown in Table 83. In this approach, the ARNG provides all of the support for the ARNG BCTs, and there is no effect from the Reserve Unit Differential. Based on the BFE, it takes only 216,000 military personnel (24 BCTs x 9,000 per BCT = 216,000 soldiers). However, the 15 AC BCTs are supported in part by ARNG and USAR units, and these support increments are multiplied by 2-2/3 to show the total support required. Subtracting the original support increment strength shows the strength of the additional RC units required to sustain the rotational cycle for six years.

Table 83. Military Personnel Required for One Rotation in the Base Case (000s)

BCTs	BCTs	Support Increments @ 5.4 each			Interim Total	Reserve Unit Differential Add-ons			Total Strength
	BCTs @ 3.6 each	AC	NG	AR		NG	AR	Paired	
9 NG	32.4	0	48.6	0	81.0	0	0	0	81.0
15 AC	54.0	49.0	11.5	20.5	135.0	19.2	34.2	53.4	188.4
TOTAL	86.4	49.0	60.1	20.5	216.0	19.2	34.2	53.4	269.4

With a Reserve Unit Differential of 2-2/3, the programmed strength of the Army will not support the ARFORGEN process. The strength required for a rotational deployment of 15 AC and 3 NG BCTs is 269,400 soldiers. This is 12,200 more than the 257,200 soldiers that, according to Table 81, are available. This means a total shortfall in the Expeditionary Force of 36,600 personnel (12,200 x 3 rotational cycles = 36,600). Because of this shortfall, the Army would have to eliminate four BFEs (4 x 9,000 = 36,000) or obtain spaces from elsewhere in the Army to have a balanced force structure.

E. The Full Spectrum Case

The Full-Spectrum Case for this analysis is the Base Case plus the addition of military personnel for two missions: Civil Support and a hedge against an MCO.

1. Adding 37,000 Dedicated Civil Support Personnel

The next step in the analysis is to program some dedicated Civil Support units for NORTHCOM and redo the calculations. Chapter 10 suggests maintaining as many as

37,000 military personnel in dedicated Civil Support units. This would include 2,000 AC, 2,000 USAR, and 33,000 ARNG personnel, of which 10,000 would be obtained from the Generating Force. This is a plausible number of dedicated and specialized troops, and it would be possible to allocate more or fewer personnel to this mission. The content of the Operating Force after this has been done is shown in Table 84.

Table 84. Operating Force with Dedicated Civil Support Units (000s)

	OSD	NORTHCOM	SOCOM	STRATCOM	TRANSCOM	Expeditionary Force	Operating Force
AC	14.0	2.0	25.0	2.3	0.5	360.6	404.4
ARNG	0.5	33.0	3.0	0.4	0.0	293.8	330.7
USAR	0.5	2.0	0.0	0.0	0.5	142.5	145.5
TOTAL	15.0	37.0	28.0	2.3	1.0	796.9	880.6

The transfer of 27,000 military personnel from the Expeditionary Force reduces the military strength available for a single rotation to 248,200. This action increases the shortfall of available troops in the Expeditionary Force by another 27,000 personnel and would require removing another three BFEs from the force structure to achieve a balanced force. Dedicating fewer military personnel to civil support would reduce the impact, but would still make it harder to sustain the ARFORGEN process.

2. Adding a Strategic Reserve Force

The Full-Spectrum Case includes both the additional dedicated civil support personnel and 50,000 ARNG personnel in a Strategic Reserve Force as discussed in Chapter 11. Table 85 shows the allocation of military personnel with both the Civil Support and Strategic Reserve added, which is the Full-Spectrum Case.

Table 85. The Full-Spectrum Case (000s)

TOTAL ARMY MILITARY PERSONNEL: 1,111.6 (547.4 AC; 358.2 ARNG; 206.0 USAR)									
Operating Force: 880.6 (404.4 AC; 358.7 ARNG; 145.5 USAR)									
OSD, etc.	Functional Commands				Regional Commands and JFCOM				
	NORTH or PAC	SOC	STRAT	TRANS	The Expeditionary Force: 796.9				
Non-Army	HD/CS	SOF	S&MD	SD&D	Strategic Reserve	Theater Forces	Force One	Force Two	Force Three
15.0	37.0	28.0	2.7	1.0	50.0	49.4	232.5	232.5	232.5
Generating Force: 231.0 (143.0 AC; 27.5 ARNG; 60.5 USAR)									

Table 86 shows the component breakout of the Expeditionary Force for the Full-Spectrum Case that includes both a Strategic Reserve and dedicated civil support units.

Table 86. The Expeditionary Force for the Full-Spectrum Case (000s)

	The Expeditionary Force: JFCOM and Regional Combatant Commands					Component Totals
	Strategic Reserve	Theater Forces	Rotation One	Rotation Two	Rotation Three	
AC	0.0	42.6	106.0	106.0	106.0	360.6
ARNG	50.0	2.7	80.2	80.2	80.2	293.3
USAR	0.0	4.1	46.3	46.3	46.3	143.0
TOTAL	50.0	49.4	232.5	232.5	232.5	796.9

Table 87 shows the BCTs for the Expeditionary Force in the Full-Spectrum Case. Seven ARNG BCTs have been removed from the Rotational Forces, but because of the Reserve Unit Differential, this reduces by only one the number of BCTs that can be deployed at any one time.

Table 87. Allocation of BCTs for the Full-Spectrum Case

NORTHCOM	The Expeditionary Force					Total
	Strategic Reserve	Theater Forces	Rotation One	Rotation Two	Rotation Three	
AC		1	15	15	14	45
ARNG	7		7	7	7	28
TOTAL	7	1	22	22	21	73

The next step is to re-compute the required military strength for each rotation in the Full-Spectrum case. This is shown in Table 88.

Table 88. Military Personnel Required for a Rotation in the Full-Spectrum Case (000s)

	BCTs @ 3.6 each	Support Increment @ 5.4 each			Interim Total	Reserve Unit Differential of 2-2/3 Add-On			Total Strength
BCTs	BCT	AC	NG	AR		NG	AR	Paired	
7 NG	25.2	0	37.8	0	63.0	0	0	0	63.0
15 AC	54.0	49.0	11.5	20.5	135.0	19.2	34.2	53.4	188.4
TOTAL	79.2	49.0	49.3	20.5	198.0	19.2	34.2	53.4	251.4

In the Full-Spectrum Case, applying a Reserve Unit Differential of 2-2/3, the required strength of a rotational force is 251,400. The available strength is 232,500 personnel. The shortfall is 18,900 for one rotation and 56,700 for the Expeditionary Force. It would be necessary to eliminate roughly six BCT forces (6 x 9,000 = 54,000) to achieve a balanced force structure.

3. Effect of the Addition of 22,000 Military Personnel

In response to an Army request, the Active Army military strength authorization has been increased by 22,000 spaces for three years. This case examines how that addition affects the Army's ability to conduct Full-Spectrum Operations. It is assumed that the Army is going to use the additional military strength as follows: add 10,000 spaces to the Generating Force to accommodate the Wounded Warriors and add 12,000 spaces to the Expeditionary Force. In that case, the Army composition would be as shown in Table 89.

Table 89. Full-Spectrum Case with Additional 22,000 Active Authorizations (000s)

TOTAL ARMY MILITARY PERSONNEL: 1,133.6 (569.4 AC; 358.2 ARNG; 206.0 USAR)									
Operating Force: 892.6 (416.4 AC; 330.7 ARNG; 145.5 USAR)									
OSD+	Functional Commands				Regional Commands and JFCOM				
	NORTH or PAC	SOC	STRAT	TRANS	The Expeditionary Force: 808.9				
Non-Army	HD/CS	SOF	S&MD	SD&D	Strategic Reserve	Theater Forces	Force One	Force Two	Force Three
15.0	37.0	28.0	2.7	1.0	50.0	49.5	235.8	235.8	235.8
Generating Force: 241.0 (153.0 AC; 27.5 ARNG; 60.5 USAR)									

With the addition of 12,000 military personnel, there is a difference of 15,600 between the 251,400 personnel needed for each rotational force and the 235,800 personnel available. This is a shortfall of 46,800, which equates to five BCT forces that would have to be eliminated to achieve a balanced force structure, one less than without the temporary increase.

F. Finding a Remedy

Up to this point in the analysis, it is clear that given current resources and policies the Army cannot provide enough support units to sustain all of its BCTs adequately to meet the needs of the ARFORGEN process as described herein. The next step is to examine what would happen if the policy on RC dwell times were changed.

1. Reducing Reserve Component Dwell Time

Figure 17 shows the rotational cycles for Rotational match of AC and RC units under a revised policy for RC units that allows for one mobilization every five years. The red RC unit repeats at the end of the six-year period as shown. Because of this policy change, it now takes only seven RC units to support three AC BCTs, or 2-1/3 RC support units per supported AC BCT. Dwell time for RC units between successive mobilizations is now 51 months.

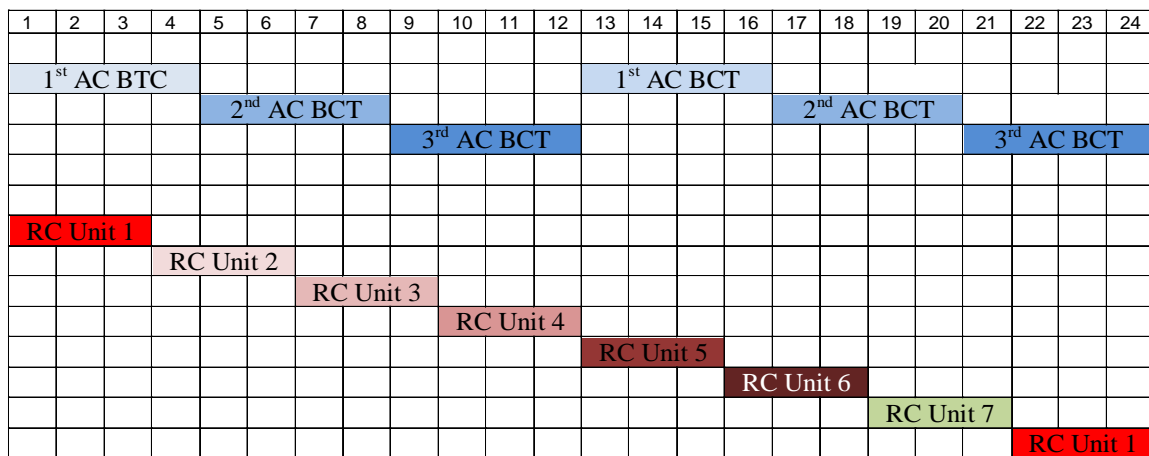


Figure 17. Rotational Cycles for AC and RC Units under Modified Policies

This new policy would result in a strength requirement for a rotation of 248,600 personnel, as shown in Table 90.

Table 90. Military Personnel Required for One Rotation with Reduced Dwell Time (000s)

	BCTs @ 3.6 each	Support Increments @ 5.4 each			Interim Total	Reserve Unit Differential of 1-2/3 Add-On			Total Strength
BCTs	BCT	AC	NG	AR		NG	AR	Total	
7 NG	25.2	0	37.8	0	63.0	0	0	0	63.0
15 AC	54.0	49.0	11.5	20.5	135.0	15.3	27.3	42.6	177.6
TOTAL	86.2	49.0	49.3	20.5	198.0	15.3	27.3	42.6	240.6

With the reduced dwell time for RC units, Army strength can sustain 73 fully supported BCTs. The difference between the required strength of 230,600 personnel and the available strength of 235,800 is a surplus of 5,200 personnel per rotational force and a surplus of 15,600 personnel in the Expeditionary Force. The surplus can be applied to the theater forces, which may be understated, and/or it can be used to accommodate an additional AC BCT.

2. National Guard Missions

Under this approach, the ARNG is being assigned two important missions in addition to its current role as part of the Operational Reserve of the Army. About two-thirds of the Guard troops will be in rotational units and one-third in non-rotational units. Guard personnel would be able to transfer back and forth from rotational to non-rotational units. The effect of these changes on the ARNG is shown in Table 91.

Table 91. Army National Guard Mission Allocations for Full Spectrum Operations

Generating Force	The Operating Force							
	NORTHCOM	SOCOM	STRATCOM	The Expeditionary Force				
	Civil Support	SOF	Missile Defense	Strategic Reserve	Theater Forces	Force One	Force Two	Force Three
27.5	33.0	3.0	3.0	50.0	2.7	80.5	80.5	80.5

3. Results of the Analysis

The summary results of this analysis are shown in Table 92.

Table 92. Comparative Results of Case

Case	Original Program	Added Missions	Added Strength	Reduced RC Dwell & Added Missions
RC Dwell Ratio	1:5 (60 mos)	1:5 (60 mos)	1:5 (60 mos)	1:4 (51 mos)
RC Differential	2 2/3	2 2/3	2 2/3	2 1/3
Dedicated Civil Support	3,000	37,000	37,000	37,000
Strategic Reserve	0	50,000	50,000	50,000
BCTs per Rotation	18-19	16-17	16-17	16-17
Rotational Force Requirement	269,400	251,400	251,400	230,600
Rotational Force Availability	257,200	232,500	235,800	235,800
Rotational Force Shortfall/ Excess	- 12,200	-18,900	-15,600	+5,200
Total Army Shortfall/ Excess	-36,600	-56,700	-46,800	+15,600
Fully Supported BCTs	69	67	68	72

The analysis indicates that, all other things being equal, the ability of the Army to conduct Full-Spectrum Operations as they have been defined in this study is influenced greatly by mobilization and rotation policy governing the availability of ARNG and USAR units in their role as an Operational Reserve. Assuming that the Army should be balanced in the sense of having the correct number and mix of support units in the Expeditionary Force to maximize the output of the BCTs, the number of RC support units needed to provide a sustained rotational capability makes the difference between having enough military personnel authorizations or not. In this analysis, changing the dwell time between successive deployments from 60 months to 51 months reduces by one-third the number of redundant RC support units needed to provide a balanced force structure, and the resulting reduction in demand changes the result from infeasible to feasible. There are, of course, additional considerations of what the impact of a reduction of nine months in dwell time might be on the RC soldiers, and these need to be assessed. That impact might be negligible given the fact that, under present conditions, many RC support units do not have 60 months of dwell time because there are too few of them in the force structure, and that some units are more in demand than others because the force structure is not designed to meet current demands.

4. Implications of the Analysis

The Reserve Unit Differential has major implications for designing the Expeditionary Force. The longer the dwell time between successive involuntary mobilizations, the more RC support units have to be maintained in the force to support AC BCTs. This redundancy can be reduced by having more AC support units provide support to AC BCTs, but there are limits on how much of this can be done. While in

dwelling time, RC BCTs and “redundant” support units will be available if an MCO occurs that calls for partial or full mobilization. The differential does not apply when RC units support an ARNG BCT. The demand for “redundant” units goes down when RC units such as civil affairs are removed from the Rotational Force and placed in the Theater Forces to be sustained by the individual replacement system. The Reserve Unit Differential allows the Army to minimize the cost in terms of rotational BCTs by placing some additional missions and forces in the ARNG.

While this analysis has suggested that the number of redundant reserve units can be reduced by shortening the dwell time for RC units, it would also be possible to make more effective use of reserve units by increasing the number that can be deployed during a year-long mobilization. The current policy is based on the perceived need for ARNG BCTs to have two months of post-mobilization pre-deployment training and one month of post-deployment processing, allowing for nine months of deployment. For ARNG and USAR support units that typically are companies and detachments, it might be possible to shorten both the pre-deployment period and the post deployment processing period to obtain 10 or 10½ months of deployment time on a year-long mobilization. These excursions can be addressed using this same methodology.

The general conclusion to be drawn from this analysis is that the Army can sustain projected rotational operations in OIF and OEF and also accommodate having a heavy corps as a Strategic Reserve and a significant force of dedicated specialized units for the Civil Support mission in the ARNG within current strength authorizations at the cost of a slight reduction in the number of ARNG BCTs available in the Operational Reserve for ARFORGEN rotations. This can be done within current funding and manpower authorizations by modifying DOD mobilization and rotation policies for ARNG and USAR units. This will not have any impact on the AC or USAR.

5. Observations

This finding depends on the data and interactions among many variables. The general methodology appears to be fairly straightforward, except for the Reserve Unit Differential phenomenon. The process is one of successive approximation in which a fixed number of military manpower authorizations by component are allocated among the various missions of the Schematic Model until a feasible solution is attained. There are, however, three caveats that have to be applied to this particular solution, and these are addressed next.

6. Data on the Army

The first caveat has to do with the accuracy of data on the Army. Despite the collaborative approach taken in this study effort, it has been difficult to obtain accurate Army data on some items.¹⁶⁹

The greatest problem is that the data on how the Army allocates its military personnel may not be accurate. These data were obtained from Army FYDP files. The Army does not use the FYDP as its official accounting system. Previous IDA studies have found that while the program element content for the Active Army appears to be in good order, the program element content for the USAR and ARNG does not. This is of significant importance to the design of the Army. One major problem is that the number of Reservists and Guardsmen shown in the Unit Training and Readiness program of the Generating Force is contradictory and generally inexplicable. Until the exact composition of the Army FYDP is known, it is difficult to deal with the Army design for the Civil Support mission. The next data problem is that the content and utilization of the Theater Forces is not clear. There are several different totals, and the distribution of personnel by theater and what they do needs to be made known.

The strengths allocated to the various provisional organizations established to participate in domestic consequence management operations have been obtained from unofficial sources and may be incorrect. The estimate of the number of Guardsmen to convert to a permanent dedicated Civil Support mission is based on those numbers. Nor is there good data on the number of DCOs, EPLOs, or staff officers who are de facto dedicated to the Civil Support mission, particularly in the National Guard. While the general thrust of the analysis may not change, the relevance and size of the Civil Support forces-in-being will affect the outcome. This observation applies both to this chapter and also Chapter 10, Conducting Domestic Operations.

7. The Design and Mix of Brigade Combat Teams

The second caveat is that this analysis is based on the original two-maneuver-battalion BCT with an average strength of 3,600 soldiers. It is evident that the two-maneuver-battalion BCT is often considered inadequate and that the theater commanders in Iraq and Afghanistan have reorganized them to provide a third or even fourth maneuver battalion to the extent they can. TRADOC has suggested that a third BCT is necessary. Doing this trade-off will increase the number of combat maneuver companies but decrease the number of BCT headquarters and troops battalions. If that is done, it will modify the outcome of this analysis. The nominal strength of the BCT will increase to 4,500 soldiers and there will be a change in the support requirements. Offsetting the

¹⁶⁹. In several cases, we have been informed that our numbers are wrong, but the correct numbers have not been offered.

reduced numbers of BCTs is the fact that larger BCTs can cover larger areas of responsibility.

Another variable is the mix of BCTs among Heavy, Stryker, and Infantry. The current mix is derived from the pre-Modular mix of Heavy and Light divisions and has little analytical support. Efforts are underway to derive a mix based on the DOD force sizing paradigm and the military strategy, and the Army is considering adding six SBCTs to the AC. The results of that work will affect the findings of this analysis at the margins.

8. The Strength of the BCT Force Equivalent

The third caveat is the validity of the BFE. This planning factor is an important parameter affecting the design of the Army is the number and mix of soldiers needed in the theater of operations to support and sustain the operations of the BCTs operating in the theater. To assist in the force sizing part of this study, we estimated a BFE was derived based on rough estimates of the numbers of troops and the number of BCTs in Iraq in 2007. These data produced a theater BCT-slice of about 9,000 soldiers, of which 3,600 are in the BCT and 5,400 are in the support increments. This result may or may not be an accurate account of what was in the theater of operations. It would be very useful to work with the Army to develop an agreed-upon BFE that could be used for further analysis.

Another factor in the BFE and the overall design process is the role of civilian employees and contractors and the extent to which they can provide support in lieu of having this done by military units and military personnel. There are significant numbers of DOD civilian employees in Iraq and Afghanistan. There are a large number of contractors in Iraq and a substantial number in Afghanistan, but there is a lack of information on what they have done and how effective they have been. The data we used indicated that the BFE of 9,000 military personnel has to be augmented by an additional 3,500 contractors. That number was derived by taking the number of contractors in theater (200,000) and applying an arbitrary 75% effectiveness factor. The basis for this effectiveness factor is questionable. The entire subject of civilian employees and contractors in the theaters of operations needs to be addressed with better data.

9. Final Observation

This series of studies on the Army has the virtue of internal consistency. The allocation of manpower authorizations to the various parts of the Army is based largely on Army doctrine and programming methods. The Army has been treated as a whole that has to be rebalanced whenever a change is made. New ideas have been introduced that provide food for thought. The results of this chapter are unlikely to be final, but they are fairly accurate and provide a good basis for further work and clarification based on accurate data and agreement on the planning factors. There is more work to be done.

Appendix A.

Operation Uphold Democracy Order of Battle

JOINT TASK FORCE 180

XVIII Airborne Corps (-)

JOINT TASK FORCE 190

10th Mountain Division (JTF-190)

HHC, 10th Mountain Division

10th Military Police Company

10th Mountain Division Band

22nd Public Affairs Detachment

27th Public Affairs Detachment

68th Engineer Terrain Detachment

66th Engineer Terrain Detachment

534th Engineer Terrain Detachment

3rd Battalion (Light Tank), 67th Armor Regiment

1st Brigade Combat Team

HHC, 1st Brigade Combat Team

1st Battalion, 22nd Infantry Regiment

2nd Battalion, 22nd Infantry Regiment

1st Battalion, 87th Infantry Regiment

A Company, 5th Battalion, 62nd Air Defense Regiment

A Company, 41st Engineer Battalion

A Company, 110th Military Intelligence Battalion

194th Military Police Company

Detachment, A Company, 10th Signal Battalion

Special Operations Command & Control Element, 3rd SF Group

Tactical PSYOP Team, 1st PSYOP Battalion

Detachment, 96th Civil Affairs Battalion

Tactical Air Control Party

10th Forward Support Battalion

Support Team, 33rd Finance Battalion

Team, 32nd Public Affairs Detachment

2nd Brigade Combat Team

1st Battalion, 14th Infantry Regiment

2nd Battalion, 7th Infantry Regiment

B Company, 3rd Battalion (M), 15th Infantry Regiment, 25th ID

B Company, 3rd Battalion, 62nd Air Defense Regiment

B Company, 41st Engineer Battalion

B Company, 110th Military Intelligence Battalion
 Detachment, A Company, 10th Signal Battalion
 Special Operations Command & Control Element, 3rd SF Group
 Tactical PSYOP Team, 1st PSYOP Battalion
 Detachment, 96th Civil Affairs Battalion
 Tactical Air Control Party
 210th Forward Support Battalion
 Support Team, 33rd Finance Battalion
 Team, 32nd Public Affairs Detachment
 Task Force Mountain
 HHC, 10th Mountain Division Artillery
 Detachment, B Company, 10th Signal Battalion
 10th Adjutant General Company (-)
 Special Operations Command & Control Element, 3rd SF Group
 Tactical PSYOP Team, 1st PSYOP Battalion
 Team, 360th Civil Affairs Battalion
 Detachment, 358th Civil Affairs Brigade
 Tactical Air Control Party
 Fire Support Element, 10th Target Acquisition Detachment
 10th Aviation Brigade
 HHC, 10th Aviation Brigade (+)
 A Troop, 4th Squadron, 17th Cavalry Regiment
 Troop, 4th Squadron, 2nd Cavalry Regiment
 2nd Attack Helicopter Battalion, 25th Aviation Regiment
 3rd Assault Helicopter Battalion, 25th Aviation Regiment
 Company, 2nd Assault Helicopter Battalion, 82nd Aviation Regiment
 2nd Medical Lift Helicopter Battalion, 159th Aviation Regiment
 Company E, Air Traffic Control Battalion, 58th Aviation Regiment
 Company E, Aviation Maintenance, 25th Aviation Regiment
 Task Force Raleigh
 2nd Battalion, 3rd Special Forces Group
 Six OD B's (companies)
 Thirty-two OD-A's (teams)
 16th Military Police Brigade
 HHC, 16th Military Police Brigade
 62nd Military Police Detachment, Criminal Investigation
 10th Military Police Detachment, Criminal Investigation
 122nd Military Police Detachment, Enemy Prisoner of War Interrogation
 Team, 360th Civil Affairs Battalion
 503rd Military Police Battalion
 21st Military Police Company
 108th Military Police Company
 118th Military Police Company
 519th Military Police Battalion
 355th Military Police Company
 988th Military Police Company

- 101st Military Police Company
- 204th Military Police Company
- 525th Military Intelligence Brigade
 - HHC, 525th Military Intelligence Brigade
 - 110th Military Intelligence Battalion (-)
 - 224th Military Intelligence Battalion Aerial Exploitation
 - 319th Military Intelligence Battalion, Operations
 - 519th Military Intelligence Battalion, Tactical Exploitation
- 11th Signal Brigade
 - HHC, 11th Signal Brigade
 - 10th Signal Battalion (MSE) (-)
 - Company, 50th Signal Battalion (MSE)
 - 53rd Signal Battalion (TRI-TAC), (-)
 - 209th Signal Company TACSAT
 - 69th Signal Company (TACSAT)
 - 19th Signal Maintenance Company
- 20th Engineer Brigade
 - HHC, 20th Engineer Brigade
 - Detachment, HHC, 416th Engineer Command
 - Detachment, 30th Engineer Battalion, Topographic
 - 92nd Engineer Battalion, Combat Heavy
 - 820th Red Horse (USAF)
 - 27th Engineer Battalion (-)
 - 37th Engineer Battalion (-)
 - 52nd Engineer Battalion (-)
 - 497th Engineer Company
 - 41st Engineer Battalion (-)
 - 264th Engineer Company, Medium Girder Bridge
 - 362nd Engineer Company, Construction Support Equipment
 - 586th Engineer Company, Assault Float Bridge
 - C Team, 535th Engineer Prime Power Detachment
 - 95th Engineer Detachment, Firefighting
 - 89th Engineer Detachment, Firefighting
 - 520th Engineer Detachment, Firefighting
 - 597th Engineer Detachment, Firefighting
- 18th Aviation Brigade
 - HHC, 18th Aviation Brigade
 - 7th Battalion, 501st Aviation Regiment
 - 1st Battalion, 159th Aviation Regiment
 - 4th Squadron, 2nd Cavalry Regiment (-)
 - Detachment, 519th Air Traffic Control Battalion
- 358th Civil Affairs Brigade
 - 360th Civil Affairs Battalion (-)
 - 450th Civil Affairs Battalion (-)
- 10th Mountain Division Support Command
 - 710th Maintenance Battalion (-)

200th Quartermaster Detachment
 LOGISTICAL SUPPORT COMMAND
 1st Corps Support Command
 HHC, 1st Corps Support Command
 2nd Materiel Management Center
 330th Movement Control Center
 380th Movement Control Team
 46th Corps Support Group (-)
 264th Corps Support Battalion (-)
 364th Direct Support Supply Company (-)
 406th General Support Supply Company (-)
 259th Field Service Company (-)
 503rd Maintenance Company (-)
 54th Mortuary Affairs Company (-)
 546th Light-Medium Truck Company (-)
 403rd Inland Cargo Transfer Company (-)
 202nd Water Supply Detachment (ROWPU)
 548th Corps Support Battalion
 590th Field Service Company (-)
 57th Light-Medium Truck Company (-)
 8th Ammunition Supply Company (-)
 48th Explosive Ordnance Disposal Detachment
 110th Supply Company
 514th Maintenance Company
 18th Subsistence Detachment
 416th Medium Petroleum Truck Company
 1st Aviation Maintenance Battalion, 159th Aviation Regiment
 7th Transportation Group
 10th Terminal Service Battalion
 169th Port Operations Detachment
 97th Heavy Boat Company
 73rd Floating Craft Company
 329th Heavy Boat Company
 82nd Water Supply Detachment (ROWPU)
 149th Heavy Crane Detachment
 335th Transportation Detachment (LSV1)
 1099th Transportation Detachment (LSV1)
 358th Transportation Detachment (ACD)
 558th Marine Maintenance Company
 155th Terminal Service Company
 11th Petroleum Terminal Company
 497th Engineer Port Construction Company
 511th Engineer Diving Detachment
 44th Medical Brigade
 HHC, 44th Medical Brigade (-)
 55th Medical Group

- 28th Corps Support Hospital
- 261st Area Support Medical Battalion (-)
 - 274th Medical Detachment, Surgical
 - 155th Medical Detachment, Sanitation
 - 172nd Medical Detachment, Sanitation
 - 248th Medical Detachment, Veterinary
 - 225th Medical Detachment, Entomological
 - 714th Medical Detachment, Entomological
 - 257th Medical Detachment, Dental
- 56th Medical Battalion, Evacuation
 - 57th Medical Company, Air Ambulance
- 32nd Medical Logistics Battalion (-)
- 18th Finance Group
 - 33rd Finance Battalion (-)
 - 18th Personnel Services Battalion (-)
 - 107th Finance Company
 - 129th AG Postal Detachment
 - Detachment 1, 351st AG Postal Company

JOINT SPECIAL OPERATIONS TASK FORCE

- Headquarters, JSOTF
- Joint Communications Unit
- Joint Medical Augmentation Unit
- 24th STSQ
- Task Force Green: 1st Special Forces Operations Detachment
- Task Force Blue: Navy Special Operations Forces
- Task Force Brown: 160th Special Operations Aviation Regiment
- Task Force Red: 75th Ranger Regiment
- Task Force Grey: 16th Special Operations Wing (USAF)
- Team, 1st PSYOP Battalion
- Team, 96th CA Battalion
- Company C, 5th Battalion, 19th Special Forces Group
- Company E, 1st Battalion, 20th Special Forces Group

JOINT PSYOP TASK FORCE

- 4th PSYOP Group
 - 1st PSYOP Battalion
 - Print Detachment
 - Corps PSYOP Support Element, 9th PSYOP Battalion
 - Tactical PSYOP Team, 9th PSYOP Battalion
 - Team, Joint Combat Camera
 - Brigade PSYOP Support Element, 4th PSYOP Battalion

Appendix B.

Abbreviations

1st AD	1st Armored Division
1st CAV	1st Cavalry Division
AAB	Advise and Assist Brigade
AC	Active Component
ACR	Armored Cavalry Regiment
AO	Area of Operations
AoE	Army of Excellence
AR	Army Reserve
ARFORGEN	Army Force Generation (Model or Process)
ARNG	Army National Guard
ARVN	Army of the Republic of Vietnam
ASCC	Army Service Component Command
BCT	Brigade Combat Team
BFE	BCT Force Equivalent
BfSB	Battlefield Surveillance Brigade
BI	Brigade Increment
BSB	Brigade Support Battalions
BSTB	Brigade Special Troops Battalion
CA	Civil Affairs
CAB	Combat Aviation Brigade
CALL	Center for Army Lessons Learned
CASCOM	Combined Arms Support Command
CBIRF	Chem-Bio Incident Response Force
CBRNE	Chemical, Biological, Radiological, Nuclear, or high-yield Explosives
CCMRF	CBRNE Consequence Management Response Force
CENTCOM	U.S. Central Command
CERFP	CBRNE Emergency Response Force Package
CI	Counter Intelligence
CMO	Civil-Military Operation
CMOC	Civil-Military Operations Center
COIN	Counterinsurgency
CONUS	Continental United States
CS	Civil Support
CS	Combat Support
CSS	Combat Service Support
CST	Civil Support Team
CW	Conventional Warfare

DCO	Defense Coordinating Officer
DFE	Division Force Equivalent
DHS	Department of Homeland Security
DI	Division Increment
DOD	Department of Defense
DOJ	Department of Justice
DS	Direct Support
DSCA	Defense Support of Civil Authorities
EOD	Explosive Ordnance Disposal
EPLO	Emergency Preparedness Liaison Officer
ESF	Emergency Support Function
FA	Field Artillery
FAO	Foreign Area Officer
FBI	Federal Bureau of Investigation
FCS	Future Combat System
FEMA	Federal Emergency Management Administration
FOB	Forward Operating Base
FYDP	Future Years Defense Program
GPF	General Purpose Forces
GS	General Support
HBCT	Heavy Brigade Combat Team
HD	Homeland Defense
HMMWV	High Mobility Multipurpose Wheeled Vehicle
HTT	Human Terrain Team
HUMINT	Human Intelligence
IBCT	Infantry Brigade Combat Team
IDA	Institute for Defense Analyses
IRR	Individual Ready Reserve
ISR	Intelligence, Surveillance, and Reconnaissance
IW	Irregular Warfare
IWO	Irregular Warfare Operations
JAG	Judge Advocate General
JDOMS	Joint Director of Military Support
JFCOM	Joint Forces Command
JKFSWC&S	John F. Kennedy Special Warfare Center & School
JSOTF	Joint Special Operations Task Force
JTF	Joint Task Force
KMAG	Korea Military Advisory Group
LIO	Limited Intervention Operations
MACV	Military Assistance Command Vietnam
MCO	Major Combat Operation
MEB	Maneuver Enhancement Brigade
MI	Military Intelligence
MLRS	Multiple Launch Rocket System
MNC-I	Multi-National Corps-Iraq
MNF-I	Multi-National Force-Iraq

MP	Military Police
MRAP	Mine Resistant Ambush Protected
MTOE	Modified Table of Organization and Equipment
NATO	North Atlantic Treaty Organization
NCO	Noncommissioned Officer
NDCI	Non-division Combat Increment
NG	National Guard
NGRF	National Guard Reaction Force
NORAD	North American Air Defense Command
NORTHCOM	U.S. Northern Command
NRF	National Response Framework
NSSE	National Security Special Events
ODS	Operation Desert Storm
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OSD	Office of the Secretary of Defense
PA&E	Program Analysis and Evaluation
PACOM	Pacific Command
PRT	Provincial Reconstruction Team
PSYOP	Psychological Operations
RC	Reserve Component
RCC	Regional Combatant Commander
RCT	Regimental Combat Team
RFA	Request for Assistance
ROAD	Reorganization Objective Army Division
RSTA	Reconnaissance, Surveillance, and Target Acquisition
S&MD	Space and Missile Defense
SAC	Special Agent in Charge
SBCT	Stryker Brigade Combat Team
SD&D	Surface Deployment and Distribution
SDF	State Defense Forces
SFA	Security Force Assistance
SIGINT	Signal Intelligence
SMDC	Space and Missile Defense Command
SMU	Special Missions Unit
SO	Stability Operations
SOCOM	Special Operations Command
SOF	Special Operations Forces
SOUTHCOM	U.S. Southern Command
SP	Self-propelled
SRC	Standard Requirement Code
SSTR	Stability, Security, Transition, and Reconstruction
STRATCOM	U.S. Strategic Command
TAA	Total Army Analysis
TOE	Table of Organization and Equipment
TRADOC	Training and Doctrine Command

TRANSCOM	U.S. Transportation Command
TSI	Tactical Support Increment
TUAV	Tactical Unmanned Aerial Vehicle
UAV	Unmanned Aerial Vehicle
UE	Unit of Employment
UIC	Unit Identification Codes
USACAPOC	U.S. Army Civil Affairs and Psychological Operations Command
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USASMDC	U.S. Army Space and Missile Defense Command
USMC	U.S. Marine Corps
WMD	Weapons of Mass Destruction

Appendix C.

References

For convenience, the bibliography is presented in four parts; three of these relate to the three sections—The Modular Force, Irregular Warfare, and A Full-Spectrum Army. A separate part of the bibliography covers Domestic Operations. Army Field Manual 3-0 is cited in all four parts of the bibliography.

The Modular Force

Army Capabilities Integration Center (Forward), Briefing: *Developing an FCS Enabled Army*, 17 October 2008.

Department of the Army Briefing, *Why We are Changing the Army*, May 2004

Department of the Army Field Manual 3-0, *Operations*, February 2008.

Department of the Army Field Manual 3-0-1, *The Modular Force*, January 2008.

Department of the Army, *Army Transformation: Report to the Congress of the United States, Improving the Capabilities of Soldiers to Conduct Full—Spectrum Joint Operations and Defend the Nation in the 21st Century*, February 2007.

Department of the Army, *Draft Modularity, Operational and Organizational (O&O) Plan, Part I*, 3 April 2004.

Department of the Army, Modularity White Paper: *Unit of Employment (UE) Operations, Version 3.5*, 16 July 2006.

Department of the Army, Table of Organization and Equipment, TO&E 07015L000, *Infantry Battalion*, 2007.

Donnelly, William B., *Transforming an Army at War: Designing the Modular Force 1991-2005*, U.S. Army Center of Military History, 2007.

Flowers, Lieutenant General Robert B., USA, “Army Engineers: Supporting the Warfighters and Reconstruction Efforts,” *Army*, October 2004.

Ney, Virgil, *Evolution of the U.S. Army Division 1939-1968*, Combat Operations Research Group, U.S. Army Combat Developments Command, Fort Belvoir, VA, 1969.

Pizer, Vernon, *The United States Army*, Praeger, New York, 1967.

Reardon, Mark J. and Jeffery A. Charlston, *From Transformation to Combat: The First Stryker Brigade at War*, Center of Military History, U.S. Army, 2007.

Schoomaker, General Peter, USA, Chief of Staff, *The Way Ahead: Our Army at War Relevant and Ready*, September 2003.

Smith, Colonel Rickey E., USA, Director, Futures Center Forward, Briefing, *Modular Forces Overview*, 19 January 2005.

Task Force Modularity White Paper, *Modular Brigade Combat Teams*, Draft 7 July 2004.

Training and Doctrine Command, TRADOC Pamphlet 525-68, *Concept of Modularity*, January 1995.

U. S. Army Cost Estimation and Analysis Center, data on various unit types by Standard Requirements Codes, or Standard Requirement Codes (SRCs).

U.S. Army Combined Arms Center, *On Point II: The U.S. Army in Operation Iraqi Freedom: Transition to the New Campaign*, May 2003-January 2005.

Center for Army Lessons Learned (CALL) Reports

Initial Impressions Report, 1st Brigade, 1st Armored Division, April 2007

Initial Impressions Report, 25th Infantry Division & 1st Cavalry Division, September 2007.

Initial Impressions Report, 3rd Armored Cavalry Regiment, March 2006.

Initial Impressions Report, 3rd IBCT, 10th Mountain Division, September 2007.

Initial Impressions Report, Observations from a Modular Force Division in OIF, 4th Infantry Division, February 2007.

Initial Impressions Report, XVIII Airborne Corps/Multinational Corps-Iraq, May 2006.

Interview, Colonel Daniel L. Ball, Commander, 3rd Combat Aviation Brigade, 17 April 2008.

Interview, Colonel Don B. Faris, Commander, 2nd BCT, 82nd Airborne Division, 6 May 2008.

Interview, Colonel Jon Lehr, Commander, 4th Stryker BCT, 22 March 2008.

Interview, Colonel Peter (Duke) DeLuca, Commander, 20th Engineer Brigade, 11 April 2008.

Interview, Colonel Terry Ferrell, Commander, 2nd HBCT, 3rd Infantry Division, 8 May 2008.

RCAAT Series, 4th Sustainment Brigade, Lessons Learned Presentation, December 2006.

Irregular Warfare

Barno, Lieutenant General David W., USA Retired, "Fighting the Other War: Counterinsurgency Strategy in Afghanistan, 2003-2005," *Military Review*, September-October 2007.

Bennendijk, Hans and Patrick M. Cronin, Editors, *Civilian Surge: Key to Complex Operations*, National Defense University, Washington DC, 2009.

Bennendijk, Hans and Stuart E. Johnson, Editors, *Transforming for Stabilization and Reconstruction Operations*, National Defense University, Washington DC, 2004.

Bovey, Robert L., *Dramatically Greater Culture and Language Capabilities*, Discussion Draft, 10 November 2004.

Brannen, Kate, "Army Introduces Advise and Assist Brigades for SFA Missions," *Inside the Army*, 6 April 2009 (www.insidedefense.com/secure).

Brannen, Kate, "Flournoy: Stability Operations a Pillar of National Security," *Inside the Pentagon*, 26 March 2009.

Brinkerhoff, Derick W., Ronald W. Johnson, and Richard Hill, *Guide to Rebuilding Governance in Stability Operations: A Role for the Military*, US Army Peacekeeping and Stability Operations Institute, June 2009.

Brinkerhoff, John R, Memorandum for the Record: *Stability Operations Conference*, 7 April 2009.

Brinkerhoff, John R., *Transforming Civil Affairs: A Proposed Plan of Action*, Working Paper, 1 February 2006.

Civil Affairs Association, *Issue Papers Recommendations Update*, July 2009.

Civil Affairs Association, *Seven Position Papers* 2005.

Defense Educational Forum, *Overview of CSIS Report on Civil Affairs*, Civil Affairs Roundtable, Reserve Officers Association, 4 March 2009.

Department of Defense Directive 2000.13, *Civil Affairs*, 27 June 1994.

Department of Defense Directive 3000.05, *Military Support for Stability, Security Transition, and Reconstruction (SSTR) Operations*, 28 November 2005.

Department of Defense Directive 3000.7, *Irregular Warfare*, 1 December 2008.

Department of Defense, *Report to Congress on Civil Affairs*, 29 April 2009.

Department of Defense, *Report to Congress On the Integration of Interagency Capabilities into Department of Defense Planning for Stability Operations*, May 2009.

Department of the Air Force, *The 21st Century Air Force Irregular Warfare Strategy*, January 2009.

Department of the Army Field Manual 100-20, *Military Operations in Low Intensity Conflict*, October 2006.

Department of the Army Field Manual 3-0, *Operations*, February 2008.

Department of the Army Field Manual 3-07, *Stability Operations*, October 2006.

Department of the Army Field Manual 3-07.1, *Security Force Assistance*, May 2009.

Department of the Army Field Manual 3-24, *Counterinsurgency*, December 2006.

Department of the Army, Army Regulation 350-1, *Training: Army Training and Leader Development*, 3 August 2007.

Dubik, Lieutenant General James M., USA Retired, "The Two Senses of Full Spectrum," *Army Magazine*, November 2008.

England, Gordon, Deputy Secretary of Defense, Memorandum: *Irregular Warfare (IW) Execution Roadmap Task 2.3.4 Action Items*, 15 May 2009.

Freeman, Waldo, Institutional Adaptability: *IBCT Modification Notional Example, Draft Working Paper*, March 2009.

Grange, Brigadier General David A., USA Retired and Scott Swanson, *Confronting Irregular Challenges in the 21st Century*, Whole of World Collaboration, 10 March 2009.

Hoffman, Frank G., “Hybrid Warfare and Challenges,” *Joint Forces Quarterly*, Issue 53, 1st Quarter 2009.

Hurley, William J., et al., Non-Kinetic Capabilities for Irregular Warfare: Four Case Studies, IDA Paper P-4436, March 2009.

Hurley, William J., Joel B. Resnick, and Alex Wahlman, *Improving Capabilities for Irregular Warfare, Volume I: Framework and Applications*, IDA Paper P-4267, August 2007.

Inside the Army, “Army Creates Complex Operations Directorate to lead new Efforts,” 23 February 2009.

Joint Center for International Security Force Assistance, *Commander’s Handbook for Security Force Assistance*, Fort Leavenworth, Kansas, 14 July 2008.

Joint Publication 3-57, *Civil-Military Operations*, 8 July 2008

Jordan, Brigadier General Thomas M., USA Retired, “Theater Military Advisory and Assistance Group (TMAAG),” *Small Wars Journal*, March 2008.

Killebrew, Colonel Robert, USA Retired, “Hybrid Warfare Demands an Indirect Approach,” *Armed Forces Journal*, June 2008.

Knabe, Lieutenant Colonel Ann P., USA, *The Distance Between ‘Us’ and ‘Them,’* (Provincial Reconstruction Teams in Afghanistan), The Officer, Reserve Officers Association, September 2008.

Lamb, Christopher J., Matthew J. Schmidt, and Berit G. Fitzsimmons, *MRAPS, Irregular Warfare, and Pentagon Reform*, National Defense University, June 2009.

Lowry, Richard S., “Highlander Brigade to Deploy to the Iraqi Lowlands,” *Military.com*, May 2009 (http://op-for.com/20009/04/highlander_brigade_to_deploy_t.html).

Mattis, General J. M., USMC, Commander Joint Forces Command, Memorandum for Joint Force Command: *Irregular Warfare Vision*, 11 March 2009.

Mitchell, Colonel David, USA Retired, Civil Affairs Association, Presentation: *Civil Affairs Issues*, July 2009.

Noonan, Michael P., *National Security Challenges for the Obama Administration*, A Conference Report, Foreign Policy Research Institute, 12 March 2009.

Petraeus, General David H., Commander CENTCOM, “United States Central Command’s (USCENTO) Quadrennial Defense (QDR) Points of Interest, 6 March 2009.

Scales, Major General Robert H., USA Retired, *The Past and Present as Prologue: Future Warfare through the Lens of Contemporary Conflicts*, Center for a New American Security, April 2009.

Shea, J.R., et al., *Force Implications of Steady-State Foreign Internal Defense and Counterinsurgency* (U), IDA Paper P-4297, November 2007 (SECRET).

Stone, Mr., TRADOC, Presentation: *Brigades Enabled for Stability Operations (BESO)*, 26 February 2009.

U.S. Joint Forces Command, Memorandum: *Irregular Warfare Vision*, 11 March 2009.

Vego, Milan N., *Systems Versus Classical Approach to Warfare*, Joint Forces Quarterly, National Defense University, Issue 52, 1st Quarter 2009.

Wahlman, Alec, *Improving Capabilities for Irregular Warfare, Volume II: Capabilities Analysis*, IDA Paper P-4267, August 2007.

A Full-Spectrum Army

Brinkerhoff, John R., The Institutional Army: FY 1975-FY 2003, IDA Document D-2695, April 2002.

Chairman of the Joint Chiefs of Staff, *Joint Vision 2010*, 1996.

Chairman of the Joint Chiefs of Staff, *Joint Vision 2020*, 2000.

Department of Defense, *Quadrennial Roles and Missions Review Report*, January 2009.

Department of the Army Field Manual 1-01, *Generating Force Support for Operations*, April 2008.

Department of the Army Field Manual 3-0, *Operations*, February 2008.

Department of the Army, Army Regulation 600-35, *Army Force Stabilization System*, 15 October 2007.

Department of the Army, Military Strength Analysis and Forecasting Division, Army G-1, “*Analysis of Unit and Individual BOG: Dwell in Steady-state ARFORGEN and How it Relates to Balance*,” (FOUO), April 2009.

Department of the Army, United States Army Posture Statement for FY 01, February 2000.

Deputy Secretary of Defense, Memorandum: *Directive-Type Memorandum (DTM) 08034-DoD Counterthreat Finance (CFF) Policy*, 2 December 2008.

Gates, Robert M., Secretary of Defense, A Balanced Strategy: “Reprogramming the Pentagon for a New Age,” *Foreign Affairs*, January 2009.

Gates, Robert M., Secretary of Defense, *Briefing on Fiscal 2010 Budget*, 6 April 2009.

Gates, Robert M., Secretary of Defense, Memorandum: *Utilization of the Total Force*, 19 January 2007.

Graham, David R., et al, *Army Force Management and Personnel Utilization*, IDA Paper P-4213, May 2008.

- McCarthy, LTG Dennis M., USMC Retired, "Operational Reserve," *Armed Forces Journal*, September 2008.
- McNeill, General Dan K, USA, Commander US Army Forces Command, *Army Force Generation within Joint Force Provider*, Briefing, 19 September 2005.
- Naylor, Sean D., "Duel for the 'Enablers' of War," *Military Times*, March 2009.
- Ochmanek, David and Andrew Hoehn, *Setting Aggregate Demand for Military Capabilities*, RAND Project Air Force, June 2005 (Updated November 2008).
- Tillson, John C. F., John R. Brinkerhoff, and Robert Magruder, Total Army Analysis 2009 (TAA-09)—A Critical Review, IDA Document D-2809, May 2003.
- U. S. Joint Forces Command, The JOE2008: Joint Operating Environment: Challenges and Implications for the Future Joint Force, <https://us.jfcom.mil/sites/J5/j59/default.aspx>.
- Wallace, General William A., Commander US Army Training and Doctrine Command, "FM 3-0 Operations: The Army's Blueprint," *Military Review*, March-April 2008.
- Domestic Operations**
- Adams, Colonel Joseph F., "Unified Command for Homeland Defense and Civil Support Missions," 1 August 2008.
- Adams, Colonel Joseph F., USA, *Crisis Mental Health Planning Factors for Disasters in the Homeland*, US Army War College Research Paper, 5 June 2007.
- Army News Service, "Consequence Management Response Force to join Army Northern Command," 5 September 2008
(www.globalsecurity.org/security/library/news/2008/09/sec-080915-arnews20.htm)
- Brinkerhoff, John R., Memorandum for the Record, *Attendance at the Defense 2009 Symposium*, 12 March 2009.
- Brinkerhoff, John R., Robert L. Bovey, and Gene H. Porter, *Managing the Consequences of a Clandestine Nuclear Detonation*, IDA Document D-3170, August 2005.
- Carter, Ashton B., William J. Perry, and Michael M. May, *The Day After: Action in the 24 Hours Following a Nuclear Blast in an American City*, Preventive Defense Project, May 2007.
- Coast Guard Auxiliary, (www.cgaux.org), 25 August 2009.
- Code of Federal Regulations, Title 32, Part 185—Military Support to Civil Authorities (MSC), current as of 22 December 2008.
- Collins, Captain M. A., USN, Chief of Staff, JTF-Civil Support, Presentation at Defense 2009 Symposium, 12 March 2009.
- Davis, Lynn, et. al., *Hurricane Katrina: Lessons for Army Planning and Operations*, RAND Corporation, 2007.
- Department of Defense Directive 3025.16, *Military Emergency Preparedness Liaison Officer (EPLO) Program*, 18 December 2000.

Department of Defense Directive, 5111.13, *Assistant Secretary of Defense for Homeland Defense and America's Security Affairs (ASD(HD&ASA))*, 16 January 2009.

Department of Defense, Missile Defense Agency, *Global Ballistic Missile Defense: A Layered Integrated Defense*, BMDS Booklet, Fourth Edition.

Department of Defense, *Strategy for Homeland Defense and Civil Support*, 2005.

Department of Homeland Security, *National Response Framework*, January 2008.

Department of the Air Force, Civil Air Patrol Annual Report and Annual Financial Report, 2008.

Department of the Army Field Manual 3-0, *Operations*, February 2008.

Department of the Army, Army Regulation 525-27, Army Emergency Management Program, 4 December 2008.

Fact Sheet, The National Guard's Role in Homeland Defense, National Guard Bureau, 8 May 2009 (www.ngb.army.mil/features/HomelandDefense/jtf/factsheet.html).

Fact Sheet, Weapons of Mass Destruction Civil Support Teams, 10 July 2008 (www.globalsecurity.org/military/agenc/army/wmd-cst.htm).

Hearn, Colonel Steven, USA, J-4, JTF-Civil Support, Presentation at Defense 2009 Symposium 12 March 2009.

Hess, Colonel Dean W., USA War Plans Division, Army Staff, 22 May 2009.

Homeland Security Council, *Planning Guidance for Response to a Nuclear Detonation*, 16 January 2009.

Hsu, Spenser S. and Ann Scott Tyson, "Pentagon to Detail Troops to Bolster Domestic Security," Washington Post.com, 1 December 2008 (www.washingtonpost.com/wp-dyn/content/2008/11/39/AR2008113002217.htm).

Joint Publication 1-02, *Department of Defense Dictionary of Military and Associated Terms*, 2007.

Joint Publication 3-27, *Homeland Defense*, July 2007.

Lystra, Clark R., *Defense Support of Civil Authorities*, 1 October 2007.

Miles, Donna, "82nd Airborne Trains to Re-assume Global Response Force Mission," American Forces Press Services (www.defenselink.mil/news/newsarticle.aspx?id=51684) 28 October 2009.

National Guard Bureau, Briefing, *National Guard Homeland Defense Issues—Ground Truth*, April 2005.

Richter, Karen A., et al., *Illustration of Interagency Roles and Responsibilities—the 10kt Scenario*, IDA Paper P-4103, June 2006.

The National Guard's Role in Homeland Defense, (www.ng.mil/features/HomelandDefense/jtf/factsheet.html) 9 April 2009.

The U.S. Army Space and Missile Defense Command, Website, www.smdc.army.mil.

- Turner, Lieutenant General Tom, Commander, “U.S. Army North: We’re Here To Help,” US Army North, September 2007.
- U. S. Army War College, How *the Army Runs: A Senior Leader Reference Handbook*, 2001-2002. Especially Chapter 22: Defense Support of Civil Authorities.
- U. S. Government Accountability Office, *Homeland Defense; Planning, Resourcing, and Training Challenge DOD’s Response to Domestic Chemical, Biological, Radiological, and High-Yield Explosive Incidents*, GSO-10-123, October 2009.
- U.S. Strategic Command, Fact Sheet, www.stratcom.mil/fact_sheets/fact_imd_print.html.
- United States Northern Command, Website: www.northcom.mil/About/index/html.
- Wolfowitz, Paul, Deputy Secretary of Defense, Memorandum: *Preparedness of U.S. Military Installations and Facilities Worldwide Against Chemical, Biological, Radiological, Nuclear and High-Yield Explosive (CBRNE) Attacks*, 5 September 2002.
- Wormuth, Christine, *Managing the Next Domestic Catastrophe*, Center for Strategic and International Studies, June 2008.

Appendix D. Illustrations

Figures

Figure 1. Order of Battle for Operation Uphold Democracy	9
Figure 2. The Army of Excellence (AoE) Notional Division	12
Figure 3. The AoE Heavy Brigade Combat Team.....	13
Figure 4. The AoE Air Assault Brigade.....	13
Figure 5. The Initial Modular Brigade-Based Concept	16
Figure 6. Initial Command and Control for BCTs and Other Brigades.....	17
Figure 7. The Initial Army Force Generation Process (2005-2007 Timeframe)	18
Figure 8. Army Approach to Reorganization	19
Figure 9. Modular Organizational Designs for Brigade Combat Teams (BCTs).....	23
Figure 10. Reconfigured HBCT Deployed in Iraq.....	43
Figure 11. Reconfigured IBCT Deployed in Iraq	43
Figure 12. Categories of Operations by Method.....	85
Figure 13. IBCT Modified for Stability Operations (SO).....	121
Figure 14. Example of a Task Force for a Limited Intervention Operation	125
Figure 15. Sample Army Force Structure Information	139
Figure 16. Rotational Cycles for AC and RC Units under Current Policies.....	206
Figure 17. Rotational Cycles for AC and RC Units under Modified Policies.....	211

Tables

Table 1. Echelons of Army Combined Arms Organizations	5
Table 2. Command Relationships between Parent and Supported Organizations.....	6
Table 3. Composition of BCTs	25
Table 4. Personnel Strength of Brigade Support Battalion Elements	28
Table 5. Lessons Learned Reports Consulted in the Study	38
Table 6. Tabulation of Unit Comments	48
Table 7. Organization of BCTs and Maneuver Battalions on 31 December 2007	50
Table 8. Task Organization of RSTA Battalion.....	51
Table 9. Distribution of Maneuver Battalions and RSTA Battalions per BCT	51
Table 10. Selected Theater Division Slices from Previous Wars	60

Table 11. BFE Strength Calculations.....	62
Table 12. BFE Strength Calculations w/ Additional Support Personnel	62
Table 13. Sub-Categories of Peacetime Engagement Operations	69
Table 14. Sub-Categories of Limited Intervention Operations.....	70
Table 15. Sub-Categories of Peace Operations.....	71
Table 16. Sub-Categories of Irregular Warfare Operations.....	73
Table 17. Primary Tasks for Stability Operations	76
Table 18. Initial Spectrum of Operations.....	79
Table 19. Sub-Categories of Domestic Civil Support Operations	80
Table 20. Sub-Categories of Homeland Defense Operations	81
Table 21. Modified Spectrum of Operations (IDA Model)	83
Table 22. Military Operations by Degree of Combat	84
Table 23. Comparison of Four Kinds of Irregular Warfare	89
Table 24. Distinguishing Attributes of Irregular and Regular Warfare	90
Table 25. Qualitative Comparison of SOs and MCOs by Factors.....	91
Table 26. Comparison of SOs and MCOs by Unit Types: Combat and Combat Support (CS).....	92
Table 27. Comparison of CMO and MCOs by Unit Types: Combat Service Support (CSS) and Personnel Service Support	93
Table 28. Relating IW Capabilities to Foreign Operations.....	104
Table 29. Relationships of IW Capabilities to the Spectrum of Operations	104
Table 30. Command and Control Capabilities.....	105
Table 31. Movement and Maneuver Capabilities	106
Table 32. Fires Capabilities	106
Table 33. Intelligence Capabilities	107
Table 34. Protection Capabilities	107
Table 35. Force Health Protection Capabilities	108
Table 36. Logistical Sustainment Capabilities.....	108
Table 37. Personnel Services Sustainment Capabilities	108
Table 38. Health Service Sustainment Capabilities.....	109
Table 39. Irregular Warfare Capabilities	109
Table 40. Relative Importance of Warfighting Functions Operational Categories	110
Table 41. Applications of Area (Regional) Knowledge	111
Table 42. Unit Types, Organizations, and Programs that Provide IW Capabilities	119
Table 43. Relationships between Supported and Supporting Units.....	120
Table 44. Possible Conversion of IBCTs for Stability Operations (SO)	121
Table 45. Comparison of Alternatives for Using BCTs in Stability Operations	126
Table 46. Capabilities of Major IW-Related Programs	128
Table 47. Differences between SOF and GPF for IW Capabilities	130

Table 48. Civil Affairs Strength and Structure	131
Table 49. Psychological Operations Strength and Structure	133
Table 50. Comparison of Current and Proposed CM Concepts of Operations.....	134
Table 51. The Two Major Parts of the Army.....	141
Table 52. The Operating Force	141
Table 53. The Operating Force (Less the Expeditionary Force)	142
Table 54. The Expeditionary Force—Force Posture View.....	142
Table 55. The Expeditionary Force—Design View	143
Table 56. The Generating Force	144
Table 57. The Army at the End of Fiscal Year 2002 (in increments of 1,000)	145
Table 58. Schematic Model of the Army at the End of Fiscal Year 2013 (in increments of 1,000)	146
Table 59. Current and Possible Future Mix of Rotational BCTs.....	150
Table 60. Comparison of 2- and 3-Battalion BCTs for Current and Possible Future Mix	152
Table 61. Derivation of Maneuver and Reconnaissance Companies	153
Table 62. Total Incremental Personnel Package to Add a Third Maneuver Battalion ...	154
Table 63. Personnel Authorizations for 3-Battalion BCTs	155
Table 64. Results of Changing the Number and Mix of a 3-Battalion BCT Force	155
Table 65. Analysis of the Feasibility of Alternative Mixes of BCTs	156
Table 66. Results for Various Mixes of BCTs by Component	156
Table 67. Impact of Constrained Cases	157
Table 68. Tradeoff Analysis for Creating Additional Maneuver Battalions	158
Table 69. Sub-Categories of, and Responsibilities for, Homeland Defense Operations .	163
Table 70. Land Defense Operations.....	166
Table 71. Sub-Categories of Civil Support Operations	168
Table 72. Current Army Specialized Consequence Management Elements	179
Table 73. Suggested Changes in DOD Policies and Practices for Civil Support	186
Table 74. Possible Army Civil Support Force Posture with Action 3 or 4.....	189
Table 75. Some Unit Types Needed for High-Intensity Conventional Combat	194
Table 76. Notional Composition of Strategic Reserve Force	196
Table 77. The Army at End of FY 2010 (000s).....	203
Table 78. The Structure of the Expeditionary Force.....	203
Table 79. BCTs in the Rotational Forces.....	204
Table 80. Base Case Operating Force (000s).....	204
Table 81. The Expeditionary Force for the Base Case (000s)	205
Table 82. Distribution of BCTs for the Base Case	206
Table 83. Military Personnel Required for One Rotation in the Base Case (000s)	207
Table 84. Operating Force with Dedicated Civil Support Units (000s)	208

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YY) September 2010		2. REPORT TYPE Final		3. DATES COVERED (From - To)	
4. TITLE AND SUBTITLE Managing Within Constraints: Balancing U.S. Army Forces to Address a Full-Spectrum of Possible Operation Needs				5a. CONTRACT NO. DASW01-04-C-0003	
				5b. GRANT NO.	
				5c. PROGRAM ELEMENT NO(S).	
6. AUTHOR(S) David R. Graham, Robert R. Magruder, John R. Brinkerhoff, James L. Adams, Richard P. Diehl, Colin M. Doyle, Anthony C. Hermes				5d. PROJECT NO.	
				5e. TASK NO. BE-6-2844	
				5f. WORK UNIT NO.	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Institute for Defense Analyses 4850 Mark Center Drive Alexandria, VA 22311-1882				8. PERFORMING ORGANIZATION REPORT NO. IDA Paper P-4579	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) Office of the Deputy Under Secretary of Defense (Personnel & Readiness)(Readiness) Pentagon Washington, DC 20301				10. SPONSOR'S / MONITOR'S ACRONYM(S) ODUSD(P&R)R	
				11. SPONSOR'S / MONITOR'S REPORT NO(S).	
12. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution unlimited.					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT This paper reports on work performed during 2009 for the USD(Personnel and Readiness) on Army issues. The work was done and the report is organized in three general phases. The first phase deals with the Modular Force, its development, nature, and performance in Iraq and Afghanistan. The second phase deals with the various terms and concepts that are applied to what has been termed "Irregular Warfare." The study derives a comprehensive Spectrum of Operations, notes the essential unity of all forms of warfare, describes eight basic elements of Stability Operations, identifies units that provide these capabilities, and proposes a way to assure that these capabilities will be nurtured and sustained in the force structure. The third phase relates how the Army might be able within current military strength authorizations and funding levels improve the capability of the rotational force, provide dedicated specialized civil support units, and also a strategic reserve force by making a slight adjustment to rotational policies.					
15. SUBJECT TERMS Army, Army Divisions and Brigades, Army Force Structure, Army National Guard, Army Operations Doctrine, Army Organization, Balancing the Army, BCT Force Equivalent, Brigade Combat Teams, CBRNE Prevention and Response, Civil-Military Operations, Civil Affairs, Consequence Management, Counterinsurgency, Counter Terrorism, Defense Support to Civil Authorities, Division Force Equivalent, Domestic Operations, Emergency Response Operations, Force Structure, Hedge for a Major Combat Operation, Homeland Defense, Irregular Warfare, Irregular Warfare Enablers, Lessons Learned, Low-Intensity Warfare, Maneuver Battalions, Military Personnel, Modular Brigades, Modularity, Operational Reserve, Operation Iraqi Freedom, Operation Enduring Freedom, Reserve Unit Differential, Rotational Force Policies, Security Force Assistance, Specialized Civil Support Units, Spectrum of Operations, Stability Operations, Strategic Reserve.					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NO. OF PAGES 256	19a. NAME OF RESPONSIBLE PERSON
a. REPORT U	b. ABSTRACT U	c. THIS PAGE U			19b. TELEPHONE NUMBER (Include Area Code)

